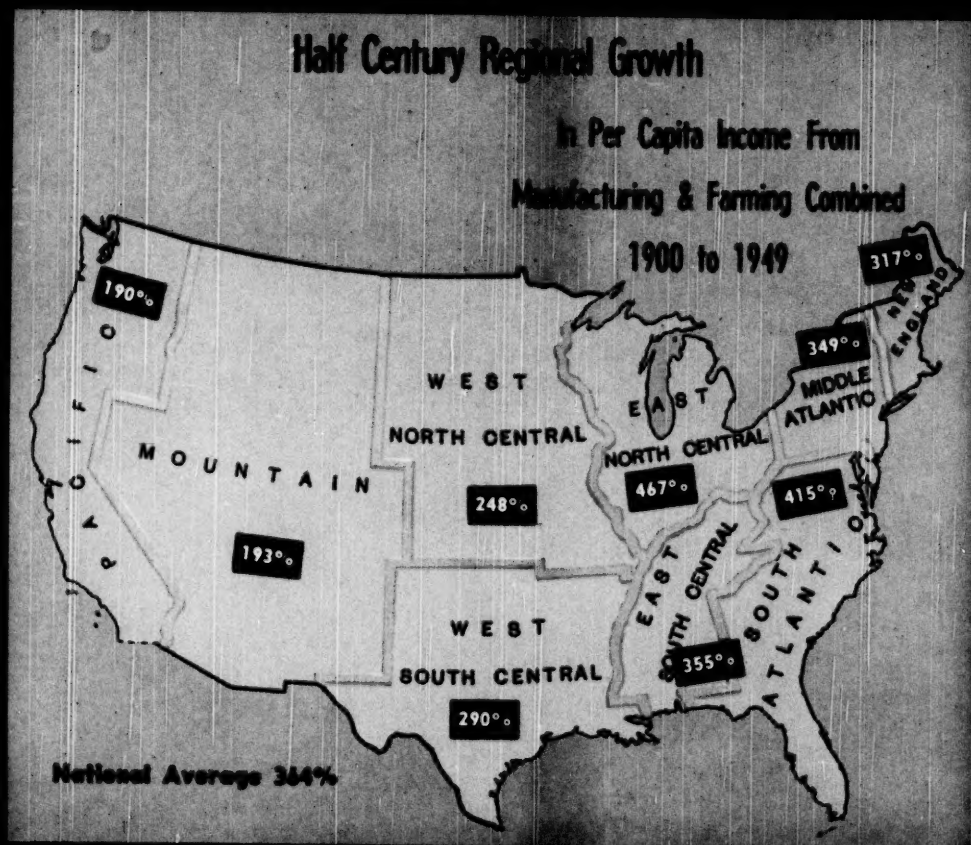


MANUFACTURERS RECORD



SOUTH CLOSES ECONOMIC GAP AS CENTURY PASSES HALFWAY MARK

Page 29


\$201,068,000* OF INDUSTRIAL CONSTRUCTION STARTED LAST YEAR

in the Gulf South

Here's news of interest to every industrialist: Contracts were awarded during 1949 for more than half again as much industrial construction in the area served by United Gas as were awarded in Pennsylvania, New York and New Jersey combined, and more than five times that in all New England.

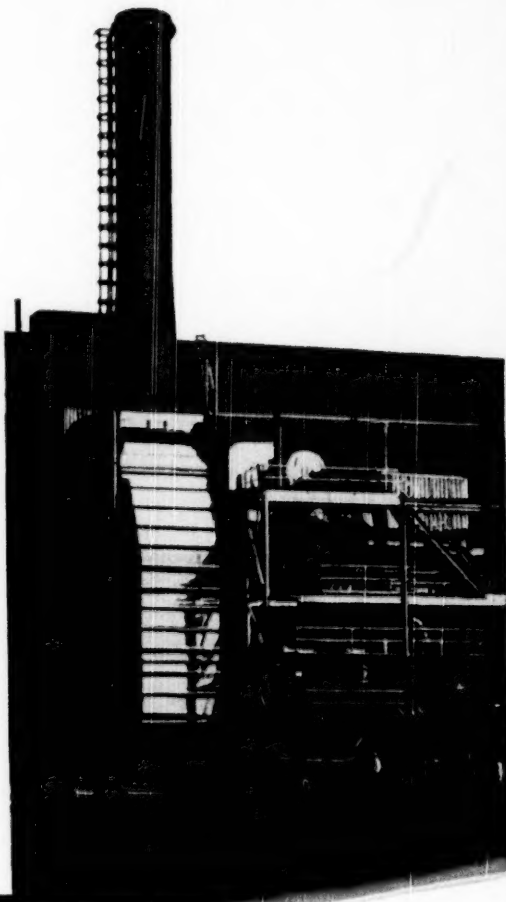
One dollar out of every five spent in the entire United States last year for industrial buildings came into the Gulf South!

The future is even brighter for this dynamic industrial frontier: One out of every four dollars of proposed industrial construction in the nation—more than a billion dollars worth of new plants—is presently planned for the Gulf South.



This mammoth development program has no equal—and it is no coincidence. The industrialists locating new plants here base their decisions on hard-headed business principles, supported by exhaustive research into the advantages offered by the area. If you are searching for markets, manpower or materials, there's a location you will like in the cities and towns served by United Gas.

*Engineering construction contracts awarded in 1949 in Texas, Louisiana, Mississippi and the Mobile, Alabama, and Pensacola, Florida, areas, as reported by ENGINEERING NEWS-RECORD, a McGraw-Hill publication.



One of several new gas-fired steam electric generating plants in the Gulf South.



UNITED GAS

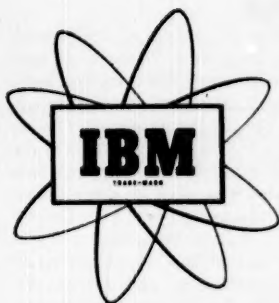
SERVING THE

Gulf South

FOR SPECIFIC INFORMATION, WRITE INDUSTRIAL DEVELOPMENT DIRECTOR, P. O. BOX 1407, SHREVEPORT, LOUISIANA



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Use of the remarkable, versatile electron tube has proved to be an outstanding achievement in time control.

The new IBM Electric Time System with Electronic Self-regulation requires no special clock or signal wiring. All units in the system are coordinated perfectly—corrected automatically should they be fast or slow. Each clock in the system is merely connected to your building's regular AC wiring and is kept on the same, uniform time electronically. Each signal, connected in the same way, sounds automatically as scheduled.

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Company

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INTERNATIONAL BUSINESS MACHINES CORPORATION

MAY NINETEEN FIFTY

An Exclusive Plan for cooperation with Industry



Mississippi is the only state where the citizens use the ballot box to prove their attitude toward new industrial enterprises.

Mississippi's exclusive BAWI Plan is the only state law which authorizes legally designated political subdivisions to vote bonds to purchase plant sites and construct buildings for industries seeking new plant locations.

The BAWI Plan represents two-fold cooperation with industry: Sound financial assistance *plus* the *proven* confidence of the people in the community where the plant will be located.

The following report is a typical example of Mississippi's exclusive BAWI Plan in action:

Aberdeen, Mississippi—\$200,000 bond issue.
Textile plant. Vote: 651 FOR, 16 against (November 18, 1949).

In addition to the BAWI Plan, Mississippi has other exclusive advantages for industries seeking to expand under favorable conditions. These factors are graphically portrayed in a new industrial booklet—"INSIDE MISSISSIPPI"—available to interested executives on request.

For Specific Information As to How Mississippi's BAWI Plan Can Provide a Building for Your Industry... Call or Write

MISSISSIPPI
AGRICULTURAL AND  INDUSTRIAL BOARD

State Office Building

Jackson, Mississippi

See Mississippi-manufactured products—Mississippi Industrial Exhibit, Ground Floor, International Trade Mart, New Orleans

THIS MONTH

50 Years' Progress

Southerners can be justifiably proud of the Economic Progress that their region has made in recent years. The analysis of this growth, prepared by our Blue Book Editor, Caldwell R. Walker, endeavors to effect a combination of past developments with future prospects in order to throw some light on what may be expected in so far as industrial development is concerned, in the South, in the second half of the 20th century. Mr. Walker's study of the changes that have occurred regionally and otherwise since the turn of the century is based on the records of the U. S. Bureau of the Census. These are believed to be the most reliable data to be found. The two most significant measures of progress, and those which are virtually complete as far back as 1900, are the farming and manufacturing industries. The study reveals many interesting facts. The growth of the South was not uniform over the fifty year period. The first two decades, industrially speaking, were years of reconstruction. The pace quickened in the beginning of the second quarter. The South was less hard hit than other regions of the country; and its recovery was quicker. The rapid progress during the last decade is well known. This period of development easily counterbalanced the lag of the first quarter century. Mr. Walker, in his conclusion, points out problems that lie ahead with a wise reminder that the rest of the country has not been sleeping during this same period.

Page 29

Big New Industry

The vigorous growth of rubber manufacturing in the South in the last decade has raised this industry to a promising position of prominence. Not only have the leading rubber and tire manufacturing companies established many vital plants in the South, in the past decade, but the region has become the center of production for over nine-tenths of the Nation's synthetic rubber. Present demand for this synthetic GR-S rubber is great, but a good deal more will be needed in the years to come, and the South is indeed fortunate that by far the largest part of this industry is located within its borders.

Page 31

Virginia Bridge

From time to time we carry articles Southern firms that are outstanding in their field. There is no particular effort made to tie the story into a current news event. Our main purpose is to report on the development of one firm that has distinguished itself in its field, and this in itself, we believe, is news. What is the story of its beginnings, how and why has it grown, how is it serving the South and what does its story tell us about the South's industrial growth—past and present? Virginia Bridge Company is an outstanding example of the type of firm that we feel should be reported on in this manner. It has grown from very humble beginnings to its present position as the third largest manufacturer and builder of steel bridges and other steel structures in the United States.

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MANUFACTURERS RECORD

ESTABLISHED 1882

Devoted to the Industrial Development of the South and Southwest



Volume 119

May 1950

Number 5

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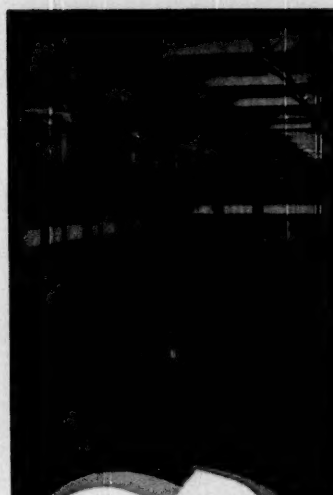
Publishers of Manufacturers Record, Construction, Daily Construction Bulletin and Blue Book of Southern Progress.

Frank Gould President
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MAY NINETEEN FIFTY



Six standard coal barges nearing completion in the Barge Construction Building at Ambridge, Pennsylvania.

The modern
all-weather facilities
of American Bridge
Company include
complete indoor
construction for
barges and other
floating equipment.

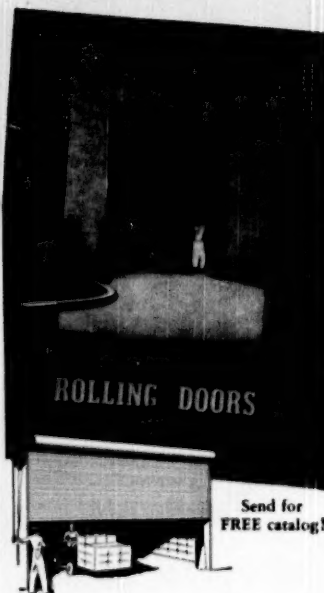


AMERICAN BRIDGE COMPANY

General Offices: Frick Building, Pittsburgh, Pa.
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Chicago, San Francisco and other principal cities
United States Steel Export Company, New York

UNITED STATES STEEL

New, Complete DOOR DATA



Space-Saving Time-Saving DOORS FOR EVERY NEED

You'll have full information on cost-cutting doors for every need in this complete new Kinneer catalog. For example, it presents:

KINNEAR ROLLING DOORS. The famous interlocking steel-slat doors — originated by Kinneer — glide smoothly, easily upward, coiling out of the way overhead. They save floor and wall space. All-metal construction assures extra years of low-cost service, plus protection against fire, storm, intrusion, damage. Available with motor operation.

KINNEAR ROLLING FIRE DOORS. The famous "Akbar" Fire Door, similar to doors above, but featuring automatic closure in case of fire, with safety for building occupants.

KINNEAR ROL-TOP DOORS. Sectional-type upward acting doors, wood or all-metal. Paneled for glass as desired.

KINNEAR BI-FOLD DOORS. Two-section doors, wood or metal, that "jackknife" to overhead position. Paneled for glass as desired.

KINNEAR ROLLING GRILLES. Sturdy upward-coiling curtain of interlocking steel bars and links that protect property without blocking light, vision, or sound. Any size.

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Saving Ways in Doorways

KINNEAR

ROLLING DOORS

MANUFACTURERS RECORD



COVER ILLUSTRATION — In his analysis of regional progress, depicted percentage-wise in the map on our cover this month, Caldwell Walker used as a base the two phases of industry upon which greatest effort has been centered in the first half of this century. These are manufacturing and farming, and these two industries in combination serve as worthwhile measures of progress, and what's more, they serve as the best indicator of what may be likely to happen in the future. It is well to mention here that the predominant factor behind the growth of the East North Central region is its new auto industry.

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LETTERS

Sir:

As a resident and business man in Europe for more than 25 years (American born), I am tremendously impressed with developments which are occurring in the European economic situation today, and which are likely to proceed at an accentuated rate as the eventual end of the Marshall plan draws nearer.

Possibly your readers might be interested in how the picture looks to me.

A great production and market opportunity is open to American industry in Europe. Of this I am certain from an appraisal of the situation here based on first-hand contact in many parts of the Continent and Great Britain since my return last November from the United States to Europe, where I am at present a Business Consultant to a number of American firms.

Many developments on this side of the Atlantic will affect American industry. In spite of the help of ECA funds, American exports to Europe are decreasing. They will drop still more when ECA comes to an end.

Today manufacturers in Europe are working at top speed to supply the goods which can no longer be purchased from the United States. This will increase purchasing power in Europe in local currencies. The improvement in production per person in European manufacture will increase the purchasing power per person in that area. As a result, we will get an increase of efficient and low cost production in Europe. American firms who realize the importance of becoming part of this European development by owning, controlling or licensing European manufacturers will reap their reward.

In short, I consider that conditions in Europe for American manufacturers getting in are still good. But they are getting poorer as local manufacturers get better, and for a given dollar of investment American manufacturers will get less as time goes on and be less of a factor in the European market. The time for interested manufacturers to act is now.

Howard Bird

Business Consultant

Luxemburg

Sir:

Please accept our congratulations on this fine edition. We are already receiving results from the publication of the Alabama story and we are securing a number of copies of the reprint from the Alabama State Chamber of Commerce for use in this office.

We will be glad to assist you in any way we can in Alabama and we want you to call on us at any time.

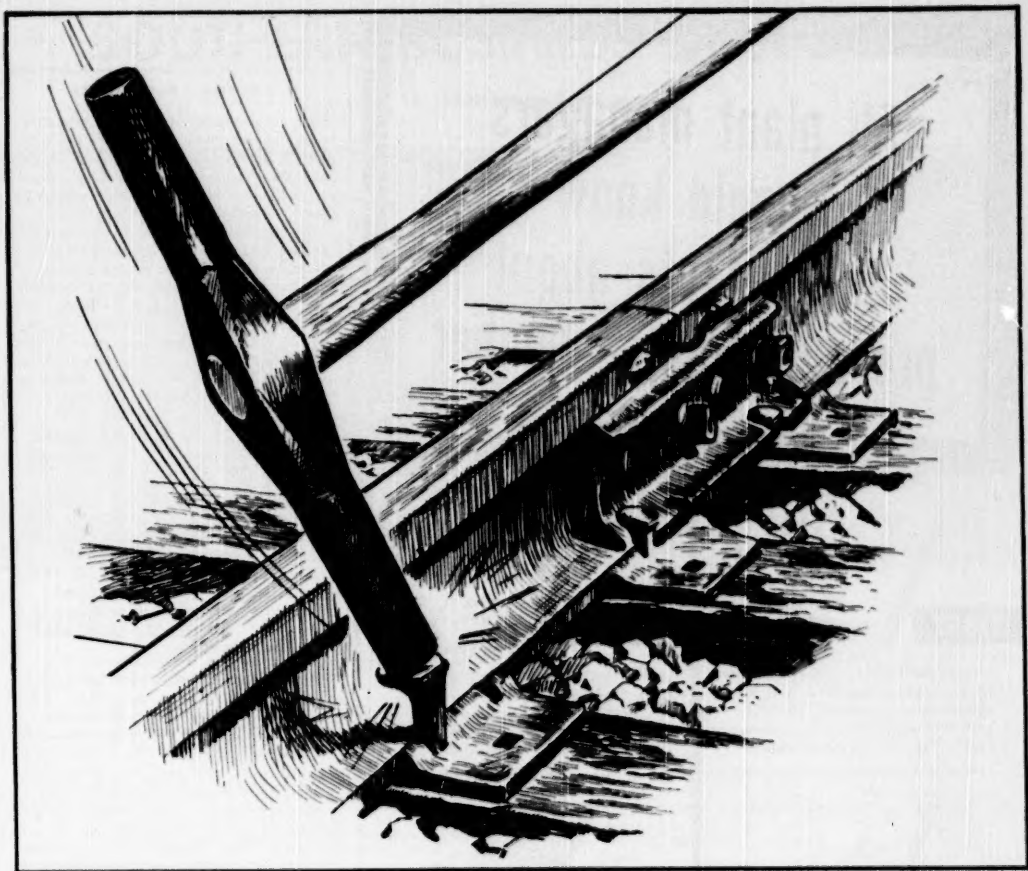
Paul Corwin, Director
Chamber of Commerce

Montgomery, Alabama

Sir:

In your February Issue under the Editorial Section "Little Grains of Sand" you

(Continued on page 8)



"George" doesn't do it for us!

Of all the forms of inter-city commercial transportation, only the railroads don't say, "let George do it."

Unlike their competitors...who have outgrown the "infant industry" stage, but who still rely on help from the people's tax dollars...America's self-supporting railroads pay all their own costs of doing business. And that is good news for "George."

For after all, who is this fellow "George" who is building and maintaining the highways, waterways and airways that other carriers use as a "place of business" for private

gain? He is every taxpayer in America. "George" is...you!

But you don't do it for us, "George." The railroads pay their own way...in the time-tested, traditional American way. It isn't easy...especially when we have to compete for business with subsidized carriers. But it's easier on you and your pocket-book, "George"! And it's better for our country, too. Because in the long run, private industries...like private citizens...must be independently self-reliant if America's greatness is to endure.

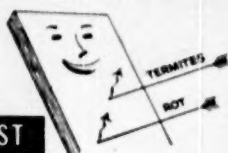
Ernest E. Harris
President



SOUTHERN RAILWAY SYSTEM

WASHINGTON 13, D. C.

All plant managers should know these facts about pressure-treated lumber



FIRST

PROTECTION—Treating of lumber preserves it—just as alloys preserve metals. The purpose is to protect lumber against costly rot and termite damage.



SECOND

PRESSURE TREATMENT vs. Surface Application—Authorities say that pressure treatment provides the only *sure, lasting* protection to lumber.



THIRD

OTHER QUALITIES TO LOOK FOR—For greatest usefulness, preservatives also should be clean, odorless, paintable, non-leaching and non-corrosive.



For complete information about **WOLMANIZED®** Pressure-Treated Lumber, write for free booklet.

*Eng. U. S. Pat. Off.



FOURTH

WOLMANIZED Pressure-Treated Lumber combines all these requirements—lasts 3 to 5 times longer than untreated wood, because it's treated under 150 lbs. pressure per square inch. Protection is deep in the wood fibers. It's clean, odorless, paintable, non-leaching, non-corrosive. Wolmanized Pressure-Treated Lumber has been proved in use for over 25 years. It will prove its value to you, too.

AMERICAN LUMBER & TREATING COMPANY

General Offices: 1620 McCormick Bldg., Chicago 4, Illinois

Branch Offices: Baltimore, Boston, Jacksonville, Fla., Little Rock, Ark., Los Angeles, New York, Portland, Ore., San Francisco.



LETTERS

(Continued from page 6)

have a reference supporting immediate return to the gold standard. We are quite pleased to see that your publication has endorsed this objective. The Gold Standard League is doing everything within its power to make this need known.

We are placing your name on our mailing list and sincerely hope that further attention will be given to this subject.

Under separate cover we are sending you a booklet, "Our Irredeemable System," which covers the subject exhaustively. Would you see that this reaches the person on your staff who writes on Economic subjects. We will be happy to furnish additional copies if desired.

Zack R. Cecil
Gold Standard League

Latrobe, Pa.

Sir:

Regarding your article in December 1949 issue, page 23, you look for high prices in Utilities and "certain work out" and "special situations."

Can you enumerate some of these "work out" and "special situations"?

I would appreciate your answer.

Rabbi Marius Ransom
Fort Lauderdale, Fla.

I am pleased to enumerate the various work-out and special situations with which I am familiar and with respect to which there may be speculative interest at this time: Standard Gas & Electric 6 per cent and 7 per cent prior preferreds as well as the \$4 preference, which latter is more speculative; New England Public Service \$6 and \$7 preferreds, as well as Northern New England Co. common which latter company owns a substantial block of New England Public Service common; International Hydro Electric preferred; Eastern Sugar Associates preferred; Central States Electric Corp. preferred; Electric Bond & Share common and American Power & Light common.

The above I have classified as "work-outs," but in listing them I am merely replying to your letter literally and such a list does not in any sense constitute a recommendation for purchase or sale. It is my policy to make recommendations to clients only after a study of their holdings and the various phases of their investment problems.—R. S. B.

Sir:

We think the idea of a mid-monthly news letter to your subscribers is excellent and we have read with interest both of the copies heretofore received.

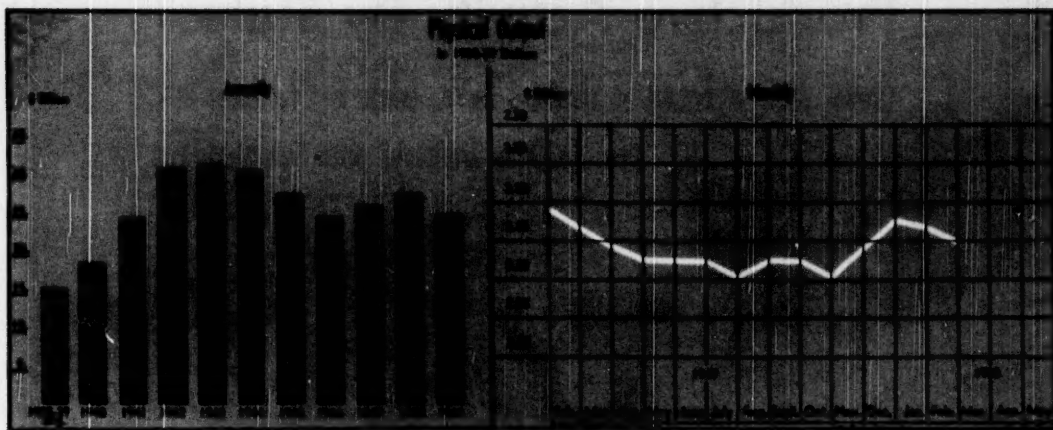
We believe that this will be very helpful, especially to some of us who are engaged in the work of community promotion and community building and we just want to express our appreciation to you for beginning this service to your subscribers.

Peter A. Reavis
Executive Vice Pres.
Covington, Va. Chamber
of Commerce

Covington, Va.

SOUTHERN BUSINESS OUTLOOK

16 Southern States



Following the Trend

Following settlement of the coal strike, economic activity in the 16 Southern states improved substantially during March and early April.

During February, however, as depicted in the chart above, and in the state data that follow, further ground was lost through declining farm prices and almost complete stoppage in Southern coal fields.

Manufacturing output remains on an even level with neither signs of weakness nor decided trend toward the upward side.

Construction enterprise is noticeably brisk.

In the fields of trade and finance, conditions continue to bear an encouraging aspect. Both retail sales and bank debits were greater in February than a year ago.

Possible weakness may be reflected in the former, however, in a changing ratio between cash and credit sales. Although retail sales as a whole are doing better than holding their own, cash sales are considerably lower than a year ago, installment purchases making up the deficit.

Monthly Statistics

	Latest Month	Preced. Month	Year Ago
PRODUCTION, FINANCE, TRADE			
Manufacturers (\$ mil.)	\$3,349	\$3,344	\$3,433
Construction Awards	277	215	193
Farm Marketings	423	407	444
Mineral Output	311	393	407
Iron-Steel (000 tons)	1,748	2,148	2,098
Cotton Consumed (000 bales)	739	686	640
Lumber (mil. bd. ft.)	969	968	814
Electric Output (mil. kw.-hrs.)	8,548	9,137	7,885
Coal Output (mil. tons)	8	17	22
Crude Oil (mil. bbls.)	88	100	97
Bank Debits	15,367	17,371	14,116
Retail Sales	2,330	2,615	2,326
Carloadings	815	983	1,002

Steel and iron data from reports of American Iron & Steel Institute; Pine Lumber from Southern Pine Association; Hardwood Lumber from Nat. Lumber Mfrs. Assn.; Carloadings Association of American Railroads; Other data from U. S. Federal Bureau statistics.

DATA BY STATES

ALABAMA

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$178.9	\$181.5	\$191.7
Minerals	5.5	9.6	11.1
Farm Receipts	14.9	13.4	17.3
Retail Sales	144.1	135.0	152.9
Bank Debits	522.2	596.4	523.9

FLORIDA

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$ 77.2	\$ 76.7	\$ 80.0
Minerals	4.8	4.8	4.5
Farm Receipts	47.1	44.6	34.6
Retail Sales	187.9	188.4	188.4
Bank Debits	835.7	904.7	758.1

ARKANSAS

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$ 57.0	\$ 57.0	\$ 61.2
Minerals	8.0	8.4	8.3
Farm Receipts	22.3	23.6	28.6
Retail Sales	60.7	68.8	62.9
Bank Debits	202.3	224.8	196.7

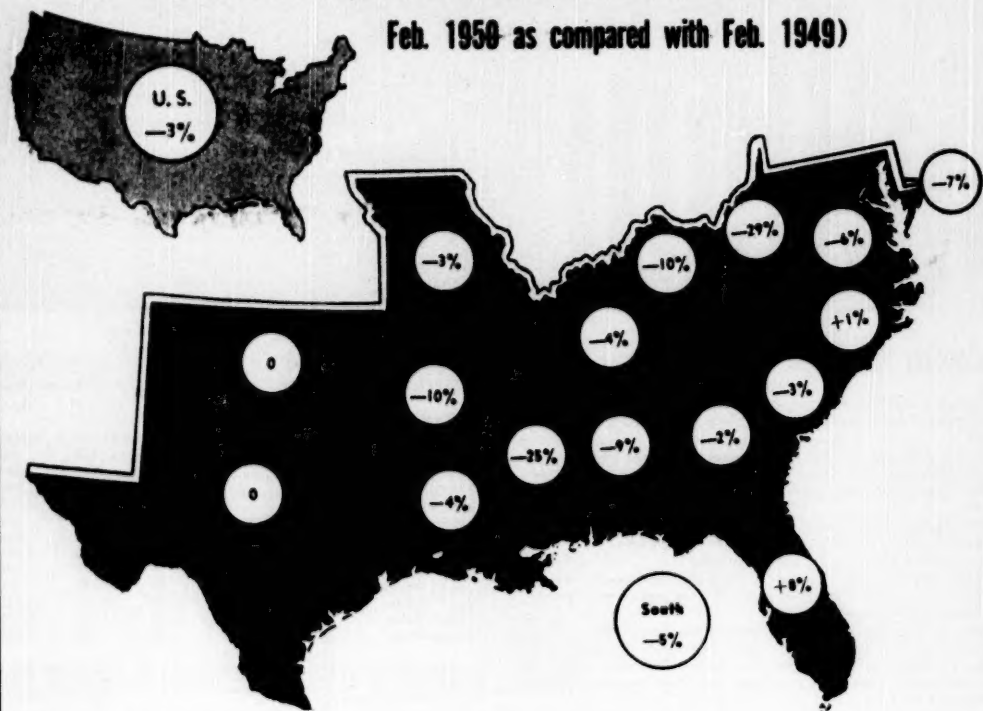
GEORGIA

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$229.0	\$227.7	\$231.6
Minerals	3.0	3.7	3.1
Farm Receipts	19.3	21.1	20.8
Retail Sales	214.8	196.0	202.0
Bank Debits	1061.8	1153.1	1016.2

(Continued on page 11)

Productive Activity By States

(Dollar value of output of Southern farms, mines and factories in Feb. 1950 as compared with Feb. 1949)



Pattern Repeated

For the second consecutive month, value of raw material output dominated Southern productive activity, resulting in declines from the level of a year ago in all except four states.

Of these four, Florida, North Carolina, Oklahoma and Texas, Florida alone was able to show a decided gain. And, in the case of North Carolina, a spurt in manufacturing output was the only factor that prevented lower farm receipts from resulting in an aggregate decline.

Peculiarly enough, farm values continue to make a converse showing in Oklahoma and Texas, enabling this grain and cotton area to maintain a par with a year ago despite lower output of minerals and a static situation in manufacturing.

The coal field states, Kentucky, West Virginia, Virginia and Alabama suffered severely from the work stoppage that brought coal output to a virtual halt throughout the month of February.

In the case of Alabama, and to a lesser degree in West Virginia and Kentucky, iron and steel output also was slowed down by the coal strike, to bring lower values in manufacturing production.

Since agriculture and coal mining constitute a larger proportion of Southern production than of the country at large, the results of these two industries were influential in producing a 2 point greater decline for the South than for the Nation.

While agricultural prices cannot yet be said to have stabilized, and are likely to extend similar declines into near future months, settlement of the coal strike in early March should materially improve the South's position from that time forward.

With manufacturing maintaining a high level of activity, fully on a par with a year ago, declines for the South should be materially lessened, and probably even neutralized for the months of March and April.

Preliminary reports already in from a number of states add support to this possibility.

BUSINESS OUTLOOK

(Continued from page 9)

KENTUCKY

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$172.0	\$170.2	\$178.0
Minerals	21.9	32.0	30.6
Farm Receipts	21.2	112.7	30.9
Retail Sales	95.5	106.9	98.9
Bank Debits	610.7	711.4	647.1

OKLAHOMA

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$104.6	\$105.8	\$100.6
Minerals	33.2	35.4	33.7
Farm Receipts	32.5	38.7	27.0
Retail Sales	93.2	117.4	96.3
Bank Debits	948.4	1037.0	919.8

LOUISIANA

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$171.4	\$171.2	\$183.4
Minerals	43.2	44.2	38.9
Farm Receipts	7.5	23.0	9.5
Retail Sales	131.8	130.3	129.6
Bank Debits	937.5	1061.4	913.8

SOUTH CAROLINA

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$175.4	\$174.5	\$179.0
Minerals .....	.9	1.0	.8
Farm Receipts	7.9	8.1	9.0
Retail Sales	79.4	96.0	76.4
Bank Debits	277.8	292.3	250.4

MARYLAND

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$219.8	\$218.6	\$235.0
Minerals	1.9	2.0	2.1
Farm Receipts	13.7	14.1	15.2
Retail Sales	79.0	108.8	85.4
Bank Debits	941.9	1077.2	898.5

TENNESSEE

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$106.2	\$105.6	\$108.8
Minerals	6.4	7.3	7.5
Farm Receipts	23.1	46.5	28.0
Retail Sales	217.6	216.5	212.3
Bank Debits	1031.4	1216.6	951.9

MISSISSIPPI

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$ 64.9	\$ 64.8	\$ 67.0
Minerals	7.4	8.4	7.9
Farm Receipts	11.5	17.7	38.1
Retail Sales	85.8	90.9	86.5
Bank Debits	213.7	251.8	200.0

TEXAS

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$584.5	\$578.0	\$583.0
Minerals	143.9	165.6	170.1
Farm Receipts	99.8	196.6	71.5
Retail Sales	442.1	538.1	425.9
Bank Debits	3551.5	3062.5	3784.7

MISSOURI

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$344.4	\$342.5	\$352.7
Minerals	7.0	7.3	7.5
Farm Receipts	59.1	60.9	63.6
Retail Sales	195.3	218.6	202.3
Bank Debits	2436.9	2604.7	2397.8

VIRGINIA

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$241.0	\$243.4	\$253.2
Minerals	6.3	9.8	9.7
Farm Receipts	20.2	33.7	21.3
Retail Sales	127.1	160.2	136.4
Bank Debits	813.0	909.1	781.8

NORTH CAROLINA

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$403.3	\$401.3	\$396.7
Minerals	1.9	2.0	1.8
Farm Receipts	16.9	19.7	26.8
Retail Sales	100.3	132.7	108.8
Bank Debits	697.2	817.1	688.0

WEST VIRGINIA

	Feb. '50	Jan. '50 (\$ million)	Feb. '49
Manufacturers	\$119.1	\$118.5	\$122.1
Minerals	15.6	49.0	60.3
Farm Receipts	5.6	7.2	6.8
Retail Sales	64.2	89.0	65.3
Bank Debits	294.7	346.8	317.5

Now...Yoloy Pipe

CONTINUOUS WELD

for use where corrosion is a problem

FOR fifteen years, Yoloy steel has been manufactured as Seamless pipe, sheets, plates and structural members. Yoloy is used in the oil, mining, railroad, chemical, trucking and other industries where resistance to corrosion and abrasion are a problem and lighter weight construction is important. Now this same unique nickel-copper low-alloy steel is available as continuous weld pipe.

Yoloy continuous weld pipe has these outstanding characteristics:

1. It is easy to weld,
2. It bends and fabricates readily,
3. Its tensile strength is high,
4. It is resistant to abrasion,
5. Its resistance to shock and vibration is high,
6. It is high in corrosion resistance.

Yoloy has an atmospheric corrosion resistance from four to six times that of regular carbon steels. Its resistance to many other corrosive elements likewise is high, making Yoloy pipe particularly well adapted for use

in the railroad, oil, mining and chemical process industries. Youngstown Yoloy continuous weld pipe also affords distinct advantages for use where piping is concealed in industrial plants, commercial buildings and residences.

For example, at a sewage plant, Yoloy pipe immersed in the sour sludge of a digester was found to be in good condition after nearly four years. When repairs were made to replace a mild steel tripod holding the pipe after only one year's service, it was found that the tripod had been almost entirely eaten up by the acid sludge.

Yoloy continuous weld pipe installed in brine lines from the wells at a salt plant is still in service after several years. Pipe previously used in this same line had to be replaced 3 or 4 times a year.

Other examples of the unusual service given by Yoloy pipe can be cited. For further information, write or phone the Youngstown District Sales Office nearest you.



Ample stocks of Yoloy continuous weld pipe are available for prompt shipment. Yoloy continuous weld pipe can be identified by YOLOY rolled in the wall of the pipe.

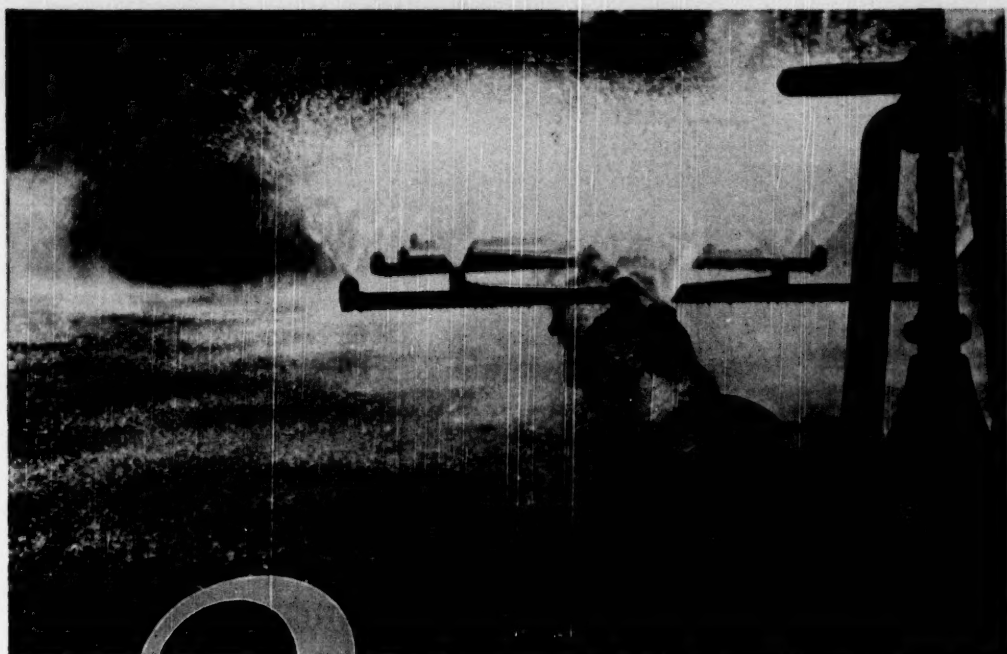
Youngstown

YOLOY STEEL PIPE

THE YOUNGSTOWN SHEET AND TUBE COMPANY

Manufacturers of Carbon, Alloy and Yaloy Steel

PIPE AND TUBULAR PRODUCTS CONDUIT BARS BOLTS COIL FINISHES SHEET AND PLATE
SHEETS PLATES WIRE ELECTROLYTIC TIN PLATE LEAD TIN PLATE PAINTS AND PAINTS



How often can you use a drop of water?

- Rolled, forged and drawn steel products.
- Structural shapes, plates, bars, small shapes, agricultural shapes, tool steel, strip, floor plate, cotton ties.
- Steel sheet piling and H-bearing piles, bridge flooring.
- Concrete reinforcing bars, reinforcing mesh.
- Black, galvanized and special finish sheets.
- Wire and wire products, including woven wire fencing, barbed wire, bale ties, nails.
- Electrical wires and cables, wire rope strand.
- Rails, track accessories, wheels, axles, forgings.
- U.S.S. High Strength Steels and U.S.S. Abrasion-Resisting Steels.
- U.S.S. Stainless Steel.
- Ground Open Hearth Basic Slag.

THAT's an important question to industrial water-users interested in sectional water shortages and the conservation of Southern resources. It is especially important to the steel industry where it takes 212 tons of water to produce a single ton of ingot steel.

The Tennessee Coal, Iron and Railroad Company uses a lot of water . . . 400 million gallons every 24 hours . . . almost ten times the daily domestic consumption of the entire city of Birmingham. If TCI used a drop of water only once, it would put a severe drain on existing sources of prime water. That is why TCI has developed an elaborate and highly efficient water reclaiming and recirculating system. Of the 400 million gallons of water used daily in steel-making operations, 334 million gallons are reclaimed and pumped back into the lines for re-use. Only 18% of the water used is lost, either by evaporation or because it is unfit for further use. In effect, TCI uses each drop of water in its system six times before it is lost.

TCI's interest in the conservation of Southern natural resources has kept pace with its growth. It has prompted such activities as . . . the making of *Soil and the South*, a color movie about the remedies for soil erosion; the cooperation of TCI Farm Products Agents in building up the Southern livestock industry; the planting of 1,500,000 pine trees to check erosion at the Bayview Reservoir; and the printing and distribution of millions of books and booklets to help Southern farmers increase their productivity and incomes.

Only by the proper use of natural resources and with the proper balance between industry and agriculture will the South reach its highest prosperity.



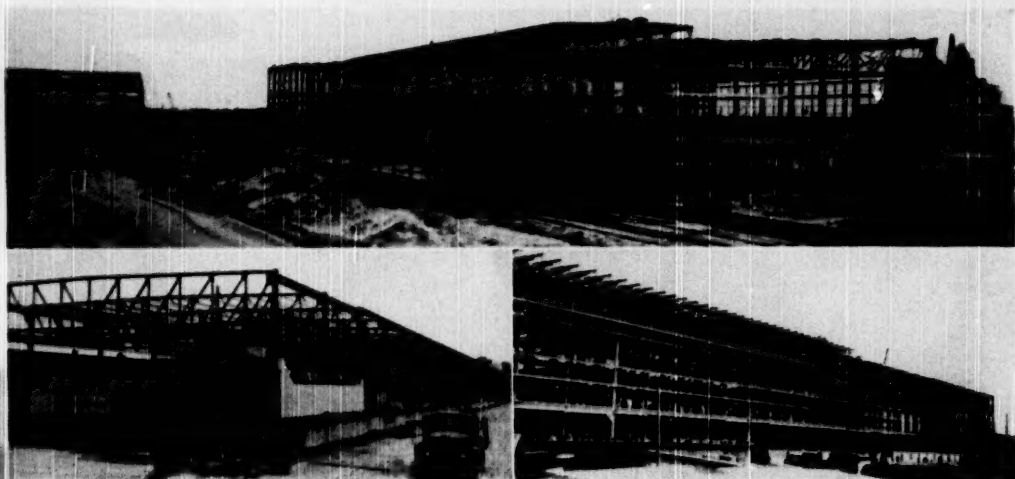
TENNESSEE COAL, IRON AND RAILROAD COMPANY

GENERAL OFFICES: BIRMINGHAM, ALABAMA

DISTRICT OFFICES: BIRMINGHAM - CHARLOTTE - HOUSTON - JACKSONVILLE - MEMPHIS - NEW ORLEANS - TULSA

UNITED STATES STEEL EXPORT COMPANY, NEW YORK

UNITED STATES STEEL



... and the STEELWORK is by VIRGINIA BRIDGE

You Can Relax When You Say That

That's just the way one of our customers put it the other day, and he is one for whom we have furnished thousands of tons of structural steel for numerous structures. It wasn't idle talk. He spoke from experience and with sincerity.

Technical perfection, close compliance with specifications, meeting delivery requirements, shipping materials in proper sequence — all these and more go to make a completely satisfactory job. By "more" we mean such things as intelligent, willing cooperation to meet job changes and emergencies; prompt, courteous

handling of details; experienced counsel to effect savings, and other features not written into contracts which make Virginia Bridge service different. It's the "Virginia Bridge Spirit" and it operates to your advantage.

Hundreds of buildings of all types have given Virginia Bridge highly developed skills in engineering, fabricating and erecting structural steel. And each job we have recognized as an opportunity to earn the goodwill, confidence and lasting friendship of our customer. That's why customers have found dealing with our organization a satisfying experience.

BUILDINGS - All Types - All Sizes

*Welded or riveted, large or small, if it's structural steel
we welcome your inquiries.*



Virginia Bridge Company

ROANOKE

BIRMINGHAM

MEMPHIS

NEW YORK

ATLANTA

DALLAS

UNITED STATES STEEL

NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

ALABAMA

ALEXANDER CITY—Cherokee Centrifugal Foundry Co., Inc., erection of a plant on a 10-acre site on the Coley and Adcock Estates, for manufacturing centrifugal pipe and fittings.
BIRMINGHAM—Southeastern Metals Co., establishment of a new steel tubing manufacturing plant.
BIRMINGHAM—J. F. Hendon & Sam Lewis, parking deck addition 18th St. and Second Ave.
BIRMINGHAM—Barrett Division of Allied Chemical & Dye Corp., roofing plant, \$2,000,000.
MONTGOMERY—Ray-Brooks Machinery Co., building, \$125,000.
PHENIX CITY—Fertilizer Co-op, fertilizer mixing plant, \$50,000.

ARKANSAS

FAYETTEVILLE—Washington County Farm Bureau Cooperative, feed mill, warehouse and elevator.
MENA—L. O. and Leonard Gaylen, plan chese plant.
NORTH LITTLE ROCK—Farmers Assoc., erection of warehouse, \$50,000.
PINE BLUFF—Terry Dairy Products, 1801 Scott, pasteurization plant, \$200,000.
TEXARKANA—Floyd H. Sexton, steel fabrication plant, \$150,000.

DISTRICT OF COLUMBIA

WASHINGTON—Parking Service, Inc., plans an all mechanical parking garage, 1426 K St., N.W.

FLORIDA

BARTOW—International Minerals & Chemical Corp., plans expansion program, \$4,000,000.
CORAL GABLES—Poe Supply Co., 425 Dixie Highway, warehouse.
DELAND—Florida Power Corp., Miami, office bldg. and storage bldg.
HIALEAH—Unit Wall Co., factory.
HOLLYWOOD—Galvin Wohl, 1050 Hollywood Blvd., service station.
JACKSONVILLE—Austin Waxed Paper Co., wax paper plant.
JACKSONVILLE—Lehigh Portland Cement Co., cement plant.
JACKSONVILLE—Valdosta Milling Co., feed mill, and warehouse, \$100,000.
LAKELAND—Florida Citrus Mutual, new building, \$40,000.
MIAMI—Florida Dairies Co., milk plant, 2500 block N. Miami Ave.
MIAMI—Fred Howland, Inc., 2-story office building.
MIAMI—Morris Investment Corp., 1463 N. Bay Causeway, warehouse and show room.
MIAMI—Henry Novak, 3201 S.W. 8th St., service station.
MIAMI—Southern Bell Telephone & Telegraph Co., 36 NE 2nd St., addition to telephone building, \$35,000.
MIAMI—South Florida Test Service, 4201 N.W. 7th St., expansion of their inland proving grounds, and plans a new \$25,000 laboratory.
MIAMI—Ward Distributing Co., warehouse, 2222 N.W. 106 Ave.
MIAMI—C. F. Wheeler, Builder, 810 W. 72nd St., milk plant.
PALATKA—Palatka Broadcasting Co., FM radio station.

GEORGIA

ATLANTA—The Atlanta Journal, and the Atlanta Constitution plan merger.
ATLANTA—Hood Oil Co., warehouse and office bldg.
ATLANTA—H. Mendel & Co., 185 Pryor St., factory.
AUGUSTA—Atlantic Greyhound Corp., P. O. Box 2553, Charleston, W. Va., bus terminal.
CALHOEN—Echota Cotton Mills, weave room extension.
COLUMBUS—Columbus Plumbing, Heating & Mill Supply Co., warehouse.
CORNELIA—Chicopee Mfg. Co., addition to Unit No. 2 of Main Mill.
DAWSON—S. J. Curry & Co., shirt factory, \$48,357.
EASTMAN—Ocmulgee Electric Membership Corp., headquarters facilities.
FITZGERALD—Southeastern Telephone Co., dist. and toll office building.
MACON—Ralston Purina Co., livestock feeds and cereals plant.

New and Expanding Plants

Reported in April—199

Total For

First Four Months of 1950

752

First Four Months of 1949

840

MONROE—Walton Cotton Mill Office, office building.
ROSSVILLE—Mark K. Wilson Co., addition to Peerless Woolen Mills.
THOMASTON—Thomaston Mills, alterations and addition to existing bleachery.
WAYCROSS—Waycross Journal-Herald, building.
WAYNESBORO—Thomas L. Burrell, Inc., grain elevator and seed drying plant, \$300,000.

LOUISIANA

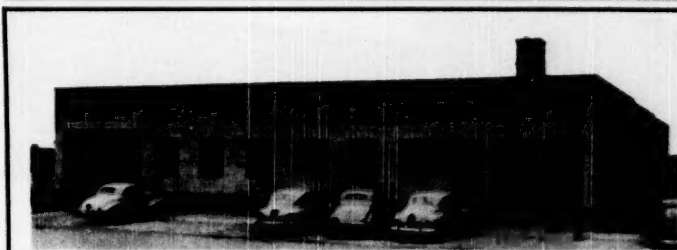
BATON ROUGE—Capitol Industries, Inc., meat packing plant.
BATON ROUGE—Ethyl Corp., P. O. Box 341, pilot plant, \$155,264.
FRANKLINTON—H. Bickham, auto sales showroom and garage building.
JENNINGS—Arthur Loewer Co., rice drier, \$100,000.
LAFAYETTE—J. R. Sonnier, addition to present building, corner of Jefferson and Vine Sts.
MERMENTAU—W. B. Johnson, rice drier, \$40,000.
NEW ORLEANS—American Radiator & Standard Sanitary Corp., one-story office, display room and warehouse building, Jefferson Davis Parkway.
NEW ORLEANS—Blaise, Inc., 200 N. Ram-

part St., plans 4-story automobile garage with parking area for 500 cars, \$400,000.
NEW ORLEANS—Industrial Air Products, 907 S. Peters St., alterations and additions to existing building.
NEW ORLEANS—Luke Motors, remodeling existing building.
NEW ORLEANS—Paretti Pontiac Co., Inc., 923 Perdido St., installation of 29-ton air-conditioning system in show room, parts department and office.
NEW ORLEANS—Carlos Tricou, Louisiana Hatcheries, Inc., two-story poultry warehouse.
ST. MARTINSVILLE—Louisiana Pecan Shellers, Inc., pecan shelling plant, \$100,000.
SHEREVEPORT—Chapman & Sons Hosiery Co., Inc., Texas St., office and warehouse, \$33,551.
SHEREVEPORT—United Gas Corp., expansion and improvement program, \$36,000,000.

MARYLAND

Chesapeake & Potomac Telephone Co. plans expenditures of \$3,173,000 for improvement and expansion of telephone facilities throughout Maryland.
BALTIMORE—Ashfield, Inc., truck terminal.
BALTIMORE—Baltimore Paper Box Co., Key Highway, additions to building and new building, \$39,697.
BALTIMORE—Baugh Chemical Co., alterations to building, 23-27 S. Calvert St.
BALTIMORE COUNTY—Chesapeake & Potomac Telephone Co., lay two submarine cables, one at Baltimore Transit Co. bridge in North Point Creek and at Transit Bridge in Jones Creek.
BALTIMORE—Esso Standard Oil Co., service station, Reisterstown Rd. and Wahotan Ave.
BALTIMORE—Globe Brewing Co., alterations to bottling and bottle beer storage building, Hanover & Conway Sts.
BALTIMORE—Gunther Brewing Co., Hudson Street garage, Hudson & Haven Sts.
BALTIMORE—Hearst Radio, Inc., FM radio stations.
BALTIMORE—James Karukus, Oriole Bakery, 2000 block N. Broadway.
BALTIMORE—C. D. Kenny Division, Consolidated Grocers Corp., one-story warehouse, Monroe St.
BALTIMORE—Moore & Co., Inc., warehouse and office, Garrett & Curtain Sts.
BALTIMORE—Poland Brothers, 305 S. Sharpe St., office and factory building.
BALTIMORE—Rubber Millers, Inc., has acquired land, 701 Caton Ave., for expansion of facilities, \$50,000 expansion program now underway.
BALTIMORE—Shell Oil Co., service station, 3700 Potte St.
BALTIMORE—Toolcraft, Inc., one-story and basement addition.
BALTIMORE—Western Electric Co., one-story building, to be used for plating work.
CATONSVILLE—Esso Standard Oil Co., St. Paul & Franklin Sts., service station, 616 Frederick Rd.
HALETHORPE, IND. BR. BALTIMORE—American Can Co., 230 Park Ave., plant for manufacture of paper milk containers, \$900,000.
THURMONT—Moore Business Forms, Inc., warehouse and office building, \$250,000.

(Continued on page 16)



One of the fine buildings recently completed in the Trinity Industrial District is the new Dallas sales headquarters of the John-Masville Corporation.

INDUSTRIAL PROPERTIES CORP., 401 Republic Bk. Bldg., Dallas, Texas, Phone Riverside 6552

New in the
**TRINITY
 INDUSTRIAL
 DISTRICT**

"Under the Skyline
 of Dallas"

NEW AND EXPANDING PLANTS

(Continued from page 15)

MISSISSIPPI

BILLOXI — Sadler Pontiac Co., sales and service building, \$38,000.
CANTON — Madison County Dairies, Inc., milk processing plant, \$60,000.
COLUMBUS — C. W. Stuart & Co., one-story industrial building, \$100,000.
FULTON — Board of Supervisors of Itawamba County plans special election to vote on \$80,000 bond issue for acquiring, owning, operating or leasing to some concern, a textile or garment type of mfg. building.
GREENVILLE — Mississippi Power and Light Co., office bldg. at Main St.
OKOLONA — Mayor and City Council plan voting on \$110,000 bond issue for construction of a garment mfg. building.
STONEWALL — Erwin Cotton Mills Co., materials for weave building and extension to mill bldg.
WEST POINT — W. E. McClure, erection of new building.
YAZOO CITY — Girdler Corp., installation of an ammonia loading and shipping station, \$60,000.
YAZOO CITY — Mississippi Chemical Corp., ammonium nitrate manufacturing building, \$77,000.

MISSOURI

KANSAS CITY — Hallmark Greeting Card Co., plant, \$2,500,000.
ST. JOSEPH — Miller Chevrolet Co., new building, \$160,000.
ST. LOUIS — American Folding Box Co., 1901 Washington, office building addition, Rutger & Missisippi.
ST. LOUIS — American Furnace Co., 2725 Delmar Blvd., office and warehouse.
ST. LOUIS — Bonfield Brothers Truck Lines, one-story truck terminal, 1405 S. 13th St.
ST. LOUIS — Falstaff Brewing Corp., warehouse.
ST. LOUIS — Hudson-Lindell at Grand, Inc., 3530 Lindell Blvd., auto showroom.
ST. LOUIS — R. & R. Realty Co., Inc., warehouse addition.
ST. LOUIS — St. Louis Die Casting Corp., 4528 Oleatha, factory addition, \$50,000.
ST. LOUIS — U. S. Atomic Energy Commission, plant.
UNIVERSITY CITY — Milton Oil Co., 8000 Clayton Rd., service station, Forsyth & Delmar.

NORTH CAROLINA

ASHEBORO — Central Telephone Co., Charlotteville, Va., renovation of a garage into an office, \$31,316.
BURNSVILLE — Duplan Corp., grading for new \$1,000,000 plant to be used for weaving and throwing rayon and nylon.
CHARLOTTE — J. O. Jones, Inc., 208 S. Tryon St., air conditioning.
CHARLOTTE — Kroehler Mfg. Co., furniture mfg. plant.
DURHAM — Erwin Cotton Mills Co., two-story addition to mill No. 6 and reroofing existing mill building.
GREENSBORO — Bates Nitewear Co., plant, \$35,000.
GREENSBORO — Bobby Burns, Inc., warehouse and office, \$23,340.
HENDERSON — Dairy Southern Ice Cream Co., dairy plant, \$89,128.

LAURENBERG — Scotland Broadcasting Co., FM radio station.
RALEIGH — Harmon Motor Co., building, \$127,284.
ROCKY POINT — Casey Lumber Co. has started work on rebuilding sawmill, filing room and boiler room recently destroyed by fire, \$25,000.
SANFORD — Central Electric Membership Corp., headquarters building.
STATESVILLE — Empire Mfg. Co. has acquired 12 acres at the Piedmont Agricultural Experiment Station, near Statesville, for a textile mfg. plant, \$500,000.
WINSTON-SALEM — Arista Mills Co., office building.

OKLAHOMA

OKLAHOMA — Shell Oil Co., gasoline extraction plant in Elk City Field.
STILLWATER — Stillwater Publishing Co., office building, \$50,000.

SOUTH CAROLINA

CHARLESTON — Hewitt Oil Co., seven service stations, \$200,000.
CHARLESTON — Pittsburgh Metallurgical Co. has applied to U. S. Engineer Office for permission to extend existing wharf in Shipyard River.
COLUMBIA — Coble Dairy Products, building.
COLUMBIA — Crowson-Stone Printing Co., building.
CONWAY — Coca Cola Bottling Co., warehouse, \$23,823.
GREENWOOD — George H. Davis, sales and service building, \$35,500.

TENNESSEE

CHATTANOOGA — Mason & Dixon Lines, Inc., trucking terminal.
CHATTANOOGA — Stewart's, Inc., new plant, \$33,949.
JEFFERSON CITY — Appalachian Electric Cooperative, headquarters facilities.
LOWLANDS — Stauffer Chemical Co. plans plant for production of carbon bisulphide, \$1,400,000.
MEMPHIS — Crescent Laundry Co., addition.
MEMPHIS — Plough, Inc., 121 S. Second St., plant, 3022 Jackson, \$1,800,000.
NASHVILLE — Farm and Home-Southern Agriculturist & Hollands Magazine, 2-story publishing headquarters building, \$125,000.
OAK RIDGE — U. S. Atomic Energy Commission, materials for laboratory building.
ROCKWOOD — Coca Cola Bottling Co., new plant.

TEXAS

ABILENE — George S. Anderson, two-story business building.
ABILENE — Lion Hardware Co., two-story business building.
ABILENE — South Texas Lumber Co., lumber yard and office building.
BROWNSVILLE — Barrow-Mendez-Watts Co., office building.
BROWNSVILLE — I. G. Operating Corp., one-story business building.
CORPUS CHRISTI — Horak's Floor Coverings, 2802 S. Port St., addition to present building.
DAINGERFIELD — Lone Star Steel Co. has expansion funds of \$7,000,000 assured for

construction of cast iron pressure pipe plant.
DAINGERFIELD — Reilly Tar & Chemical Corp., coal tar by-products plant, \$500,000.
DALLAS — Hermann Goldblatt, one-story service station and garage.
DALLAS — Hillcrest Mausoleum, addition.
DALLAS — Neiman Marcus Co., two-story building.
DALLAS — Reinhart Oil News Co., 2411 Pearl St., one-story office and printing building.
DALLAS — Wega Corp., one-story warehouse, Howell & Levee Sts.
EL PASO — Mountain State Telephone & Telegraph Co., remodeling present building, 510 Texas Ave., \$117,000.
FORT WORTH — Ella B. Brochman, Trustee for Maday M. Brochman, will construct with day labor, one-story building for manufacturing and office, \$30,000.
FORT WORTH — Central Freight Lines, Inc., 310 South 12th St., terminal warehouse, \$164,236.
FREESPORT — Dow Chemical Co., one-story auditorium, \$33,011.
GALVESTON — Galveston Wharves, one-story warehouse.
HOUSTON — Allied Chain Link Fence Co., plant building.
HOUSTON — American Canning Co., 952 Leekwood Drive, addition to plant, \$40,000.
HOUSTON — Continental Oil Co., one-story service station, \$35,000.
HOUSTON — Gulf Oil Corp., one-story service station.
HOUSTON — Houston Merchants Exchange, one-story office building.
HOUSTON — Humble Oil Co., office building, \$80,000.
HOUSTON — Humble Oil & Refining Co., Humble Bldg., remodeling service station.
HOUSTON — Kagan-Rudy Kaplan, 821 Commerce St., one-story office building, 2610 Main St., \$310,000.
HOUSTON — Mathieson Chemical Co., warehouse, Wallisville Rd.
HOUSTON — Paige-Bell Corp., 1419 Paige St., shop building, \$25,000.
HOUSTON — Rath Packing Co., 2117 Walker Ave., remodeling of interior of plant.
HOUSTON — South End Building Materials Co., 4530 Kirby Drive, new building materials and ready mixed concrete plant, \$100,000.
HOUSTON — Southwestern Bell Telephone Co., addition to telephone building, Crown and Wixahachle Sts.
HOUSTON — Truck Pari, A. Equipment Co., Inc., 4026 Griggs Rd., one-story building.
HOUSTON — Union Tank & Supply Co., manufacturing plant.
LONGVIEW — Tennessee Eastman Corp., chemical manufacturing plant.
LUBBOCK — R. O. Bennett, 1907 Texas Ave., business building.
LUBBOCK — Butler-Brasher Co., 406 Ave. M., business building.
LUBBOCK — Jim Carter, business building, 1410-12 Q, \$27,317.
LUBBOCK — J. W. Chapman & Sons, one-story office, showrooms, and warehouse.
LUBBOCK — A. L. Ferguson, 1420 Texas, auto supply building.
LYFORD — Lyford Gin Association, grain elevator, \$100,000.
HEALLEN — Hygeia Milk Products Co., building.
MIDLAND — Miles Hall Bulck Co., sales and service building, \$56,450.

(Continued on page 58)



THE Nashville Bridge Company will gladly quote on structural steel requirements anywhere in the South and Southwest. Our skill in the fabrication and erection of intricate steel structures is well known. We are particularly qualified to supply the Power Distributing Industries with transmission towers and switchyard structures—hot-dip galvanized after fabrication. Fabrication and erection of both steel and machinery for movable type bridges is a specialty. Look to Nashville for simple steel requirements as well as intricate structural jobs.

Plants and offices in Nashville, Tennessee and Bessemer, Alabama. We also own and operate the Bessemer Galvanizing Works—largest galvanizing plant in the South.

NASHVILLE BRIDGE COMPANY
 NASHVILLE TENN. — BESSEMER, ALA.



WASHINGTON REPORT

IT'S easy to be fooled by statistics showing that private debt of Americans, while much higher than it was pre-war, still is much easier to carry than it used to be.

Any economist who looks at only **one** factor is known as a "particularist." Lots of politicians are "particularists," particularly when they want to be re-elected and want people to think everything is hunky-dory.

Fact of the matter is, conditions today are such that Americans cannot divorce their **private** debts from the **public** debts. The tax collector is so close upon everyone (as he should be) that individuals are paying off mortgages they don't even know about—debts made by cities, counties, states and Uncle Sam.

It's true that carrying charges on mortgages, both the private (recognized) mortgages and on the federal, state and local debts, are smaller, percentage-wise, than ever before. But the total interest also is greater, dollar-wise, than ever before—and rising all the time in various ways.

There was a time when individual debt could be computed without much regard to federal, state or local debts. That day has gone forever. Individual debt today logically can be considered only against the background of the huge public debt that is building up, at the rate of more than \$5 billion annually.

* * *

AGAINST this background of dark fiscal clouds, consider these prospects for the next six months, no matter what politicians or federal economists say.

I—More and more Americans are becoming "strapped" financially. They are borrowing on present assets to finance other improvements, or to take on new debts.

(It's no help to say that we are in better condition because people now can take 25 years to pay off what they used to try to pay off in five or ten years. That is the kind of "improvement" the so-called "middle-income" housing legislation would have brought. In its orig-

inal form, it would have allowed mortgages up to 100 years in length to be financed, a palpable absurdity.)

2—Rents are going to go up regularly, although perhaps not precipitately, as the new high cost-level takes effect in computing rates. This will take more money that consumers had been spending on less-essential items.

3—Costs will continue to inch up all along the way. Once labor costs would have headed downward, in a "free" economy, but strong unions and a sympathetic federal government are making hourly-rate higher by the year. This startling (to some persons) development is taking place in the midst of growing unemployment. Number of jobless now is around 5,000,000 and will be 500,000 greater by mid-August.

4—Taxes in the long haul are going to be raised—federal, state and local. There's no escaping it. Tax collections simply are not meeting expenses of Government on any level, due to high cost-levels for construction and maintenance today.

5—Demand for "luxury" goods for the masses will become less and less as the pinch picks up. Laborers (excepting a few favored unions) never have been able to keep up with inflationary cost increases and they probably never will be able to.

In short, the wiser politicians and observers here are convinced now that **Americans are entering the period in which they will start paying for all**

the political errors and miscalculations of recent years. The people won't like it, but pay they must.

The economy is going to keep operating on a high, or higher, level. But the costs aren't going to be postponed any more. The situation has reached the point where people are having to pay—in one way or another—for all the arms for Europe, the huge military force, the aid to Europe, and the huge and growing federal operations at home.

The chips now are down for the really momentous decisions by the people. If they follow England's example, private businessmen might

60 Years Ago

Manufacturers Record Reported:

April 19, 1890—The great business activity of Tennessee is indicated by a recent transaction. A Memphis grocery house has just given an order to the Louisiana Sugar Refinery for 1,000 barrels of granulated sugar. This is the largest single order of the kind ever received at New Orleans from Memphis. It will require one solid freight train to transport the goods.

May 31, 1890—The following extracts from a recent article in the Boston "Evening Traveller" are interesting and significant.

New England knows good investments from bad, and will have nothing that is not good. The Southern investment field has been investigated, and New England money is pouring into it.

New England does nothing in a small way. Where the great financiers lead, the whole section follows. The leaders have started a vigorous and enthusiastic movement Southward.

New England financial adventure has always resulted in widespread and stupendous development. In Chicago, Denver, Kansas City, St. Paul, Minneapolis and Cleveland in the West, see prototypes of future cities in the South.

WASHINGTON REPORT (CONTINUED)

as well get ready to get out of business. If they choose to call a halt, it's possible that some corrections can be made by new politicians and the future still will hold some freedom for the people.

Whatever the choice, the months and years ahead are going to be economically tough, overall. The politicians are coming into the period in which they must face problems that faced England under John Law, France under Necker and Italy under Garibaldi. History shows that the politicians in these countries chose further inflation as the only way out. History also shows that inflation always has killed representative Government, brought eventual dictatorship, revolution and collapse.

* * *

FROM now on out, don't look for much important activity by Congress—outside of politicking. The session may last up until the end of July, but if so, it will be only because President Truman and his Congressional advisers feel they will gain some political advantage thereby.

Actually, the few measures (outside general appropriation bills) Congress has passed so far have been very mild and most of them not even important. Kerr natural gas legislation (vetoed by Truman) probably was the most **significant** legislation passed in this session. All other measures failed to point in any direction.

Since Congress finds it can't legislate, the tendency is to investigate. Following probes will be more or less in the news in the next month or so:

LOBBYING—Representative Frank Buchanan (D.-Pa.) continues his "scholarly approach," fortified with new funds. He may be taking it easy for a while in hopes he can catch the Republicans off guard close to the election this fall. If he has any rabbits in his hat, that would be a good time to bring them out.

MONOPOLY—Scrappy Representative Emanuel Celler (D.-N. Y.), whose subcommittee on the Study of the Growth of Monopoly Power so far has been in labor for some months without producing much new, will be going into the newsprint industry and into the steel industry in a few weeks. The staff of this subcommittee is made up of "liberals," who have fuzzy notions about just what they want to accomplish.

CRIME—Headed by able, Fair Dealing Estes Kefauver (D.-Tenn.), this probe **could** become most important to industry, whose employees waste precious hours either playing the horses, or worrying about gambling losses, while at work. Kefauver is loyal to Truman on public welfare measures, but the Tennessean is personally impeccably honest

and an idealist. He will surprise many persons with his investigation. The \$150,000 he received is far more than he and Senator Joseph McCarthy (R.-Wis.), co-author of the crime investigation idea, had hoped to get.

STATE DEPARTMENT—Senator McCarthy's charges already have drawn damaging admissions from the Department of State as to its personnel policies—such as having allowed almost a hundred weak security risks to resign without prejudice, so that they could get jobs in other federal agencies.

COMMERCE DEPARTMENT—It isn't as widely-publicized as the other investigations, but the truth is that a twin probe of Department of Commerce personnel policies has revealed some most damaging facts. Commerce Department admits (to both Senate and House Appropriations Committees) it has allowed scores to resign without prejudice, but that some of its weak security risks **refuse** to resign! Congressmen hint at exposure of the weak security risks (by Congressional speeches, protected from libel) if the Department of Commerce doesn't get rid of them.

* * *

AFTER almost a year of encouraging small manufacturers in America to go after overseas markets, Economic Cooperation Administration officials feel that their success has been "encouraging."

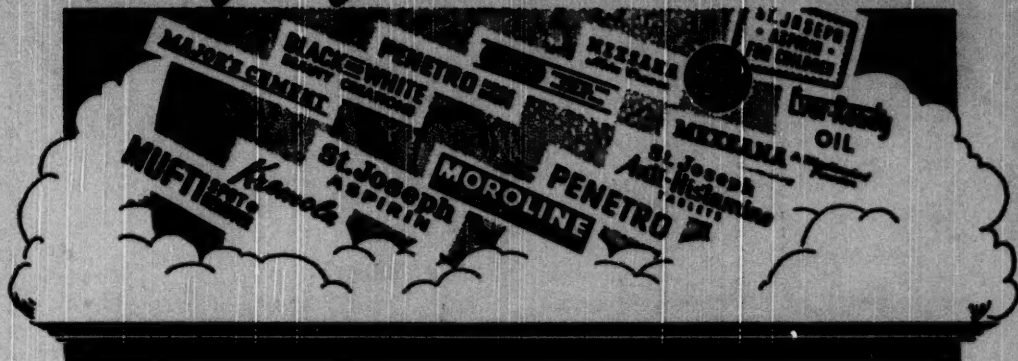
However, the agency officials say frankly, off the record, that American businessmen are not "thinking abroad" as much as the times seem to demand. These officials are sending experts to Europe to help European industrialists learn how to sell more in the U. S. Every effort of the federal government is being bent toward increasing imports.

* * *

BUDGET deficit on June 30 (for fiscal '50, ending then) may be closer to \$6 billion than \$5 billion, as had been estimated. Also, it's now pretty certain that Congress won't pare much off the President's budget requests, overall, for fiscal '51. That means another deficit of at least \$5 billion, maybe much more, depending upon collections and other contingencies.

In short, there's more inflation coming. Treasury is getting ready to make another plea for borrowed funds from the public. It will be a significant drive. Odds are great Secretary Snyder is going to be surprised at the number of Americans who have decided to leave their money in other equities, fearing for the value of the money they'll get back when they cash bonds.

"Ploughing 'Round The World"



EVERY DAY, in every county of the U.S.A. and in 60 foreign countries, people ask in many languages for the drug products, cosmetics and other household needs bearing the familiar trademarks of PLOUGH, INC., whose main plant and headquarters are in Memphis, Tennessee.

In 1908, the sole employee was the founder, who now heads the Company as president. Today approximately 1,000 employees of Plough and its subsidiaries carry on a business that grew from one product to 62. The Company is now constructing a new manufacturing plant at Memphis that will more than triple its size.

The name Plough, Inc., is a worldwide symbol of dependability. Through careful analyses by the Company's research division, high quality is maintained for such Plough products as St. Joseph Aspirin, St. Joseph Aspirin for Children, Mezzana Medicated Powder, Mezzana Skin Cream, Penetro, and many others.

Plough salesmen cover every county in America and export representatives send in their orders the year 'round from world centers. With manufacturing plants also in several foreign countries, this Southern company's global business justifies its slogan, "Ploughing 'Round the World."

This is another advertisement in the series published for more than ten years by Equitable Securities Corporation featuring outstanding industrial and commercial concerns in the Southern states. Equitable will welcome opportunities to contribute to the further economic development of the South by supplying capital funds to sound enterprises.

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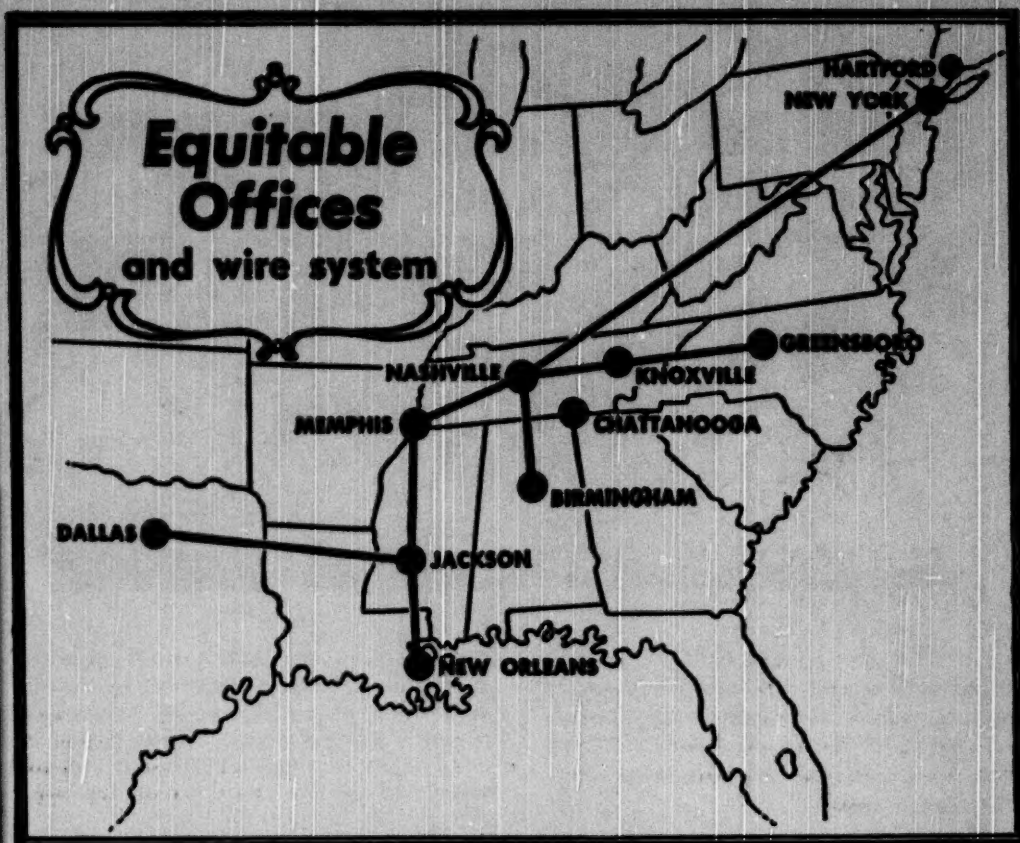
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Stocks record a 20-year high in mid-April

The advance has been led by heavy buying in Radio and television shares

By Robert S. Byfield
Financial Editor

IN recent issues of THE MANUFACTURERS RECORD we have stressed our opinion that no important price reaction in the stock market was in immediate prospect. At this writing the momentum of the advance which has now continued for over nine months seems undiminished. When this column was written for the March issue, the Dow-Jones Industrial Average was slightly above 200, a month later it was 207 and it has now reached 214, the highest in almost twenty years. We do not believe such a historical comparison of this character should carry much weight since in the first place the present purchasing power of the dollar is quite different from what it was in 1930, and in the second place convertibility into gold no longer exists. While the Dow-Jones Averages are computed accurately and fairly, nevertheless, the corporations whose shares comprise them have grown and developed very substantially in the past two decades. They are enjoying a far larger sales volume, many of them are producing and distributing products that were not even heard of years ago, the number of employees has greatly increased and the ownership of their shares has widened. Financially speaking, many of them have paid off or reduced their debts measurably and huge amounts of money have been plowed back into the business.

Common Stock Book Values—While it is difficult to make satisfactory computations thereto, it would appear that common stock book values on a per share basis have more than doubled. Of course, we do not mean to imply that book values are the sole basis for judging the worth of common stocks. Earnings and other characteristics are much more important, but book values for many reasons should not be disregarded, particularly just now

when replacement costs have risen so rapidly. For example, if an integrated steel company carries its plant, equipment and facilities on its books at cost this may represent in the aggregate say about \$80 or \$100 per ton of integrated capacity. This need not be a measure of its earning power, one of the reasons being that it might cost about \$250 per integrated ton to duplicate such facilities and any newcomer desiring to enter the business would have to make an investment of this character. This would entail vastly higher carrying and depreciation charges and would naturally afford a distinct advantage to the long established producer.

Utility Shares Slow Down—During the past month public utility shares after slightly surpassing their 1946 peak, which in turn was the highest figure reached since 1931, have tended to lag somewhat. We believe this is merely a resting period after the long advance of 1949 and early 1950. Furthermore, and quite unexpectedly, the market for utility common stocks suffered a mild case of indigestion when a considerable number of new issues of stock and convertibles were marketed to the public and to existing shareholders late in March. Pressure from this source has now ceased and it may be considered a closed episode.

Confidence Inspiring Factors—Factors making for confidence in quotations include the passage of legislation liberalizing the activities of trustees in New York State with respect to the purchase of common stocks. Although the law does not become effective until July 1st, some institutional trustees may already have been influenced by it. They may now be more willing to place funds into equities rather than into conservative senior securities.

Superimposed upon the various market influences which we have from time to time mentioned has come an entirely unexpected monetary development which has stimulated speculation. In many parts of the world the so-called free market price for gold bars and gold coin has been dropping, a reversal of the trend which began late in 1945 after V-J Day. At the same time the quotations for the U. S. paper dollar have been gradually lowered in terms of foreign currencies. This process has been somewhat stimulated by the reported sales of gold by the Russians in such markets as Paris, Vienna and Cairo. The Soviets never seem to lose any opportunity to exercise undesired economic pressure where it may be calculated to create unrest, distress or unemployment. Undoubtedly Moscow considers that any deflationary movement outside of its own sphere of influence might increase unemployment and this would be fruitful propaganda. Perhaps the decline in the dollar is one of the results of the recent widespread devaluation of currencies and if so, it is only a temporary phenomenon, which may disappear in due course. Some impetus to the selling of dollars may have been created by the world-wide realization that the Federal Government will not only be unable to balance its budget for the current fiscal year but for some time to come.

Canadian Oil Shares—The boom in Canadian oil shares has now reached a more active stage. A great deal of capital from the United States is continuing to move into the Western Provinces with oil and gas as the primary attractions. Important discoveries have already been made. This particular movement in capital may also to some extent be considered a "flight" from the U. S. dollar, the theory being that with Canada ultimately independent of foreign fuels due to her new found wealth in oil and gas her international clearing account will henceforth balance more easily even with reduced British buying of her goods with beneficial effects on her currency.

Further Inflationary Clues—On the domestic front the action of particular groups of stock provide further inflationary clues. Raw material shares such as the oil and gas group and some of the metals and steels have been in good demand. Strength in stocks of this character

(Continued on page 48)

"Picking Growth Stocks For The 1950's"

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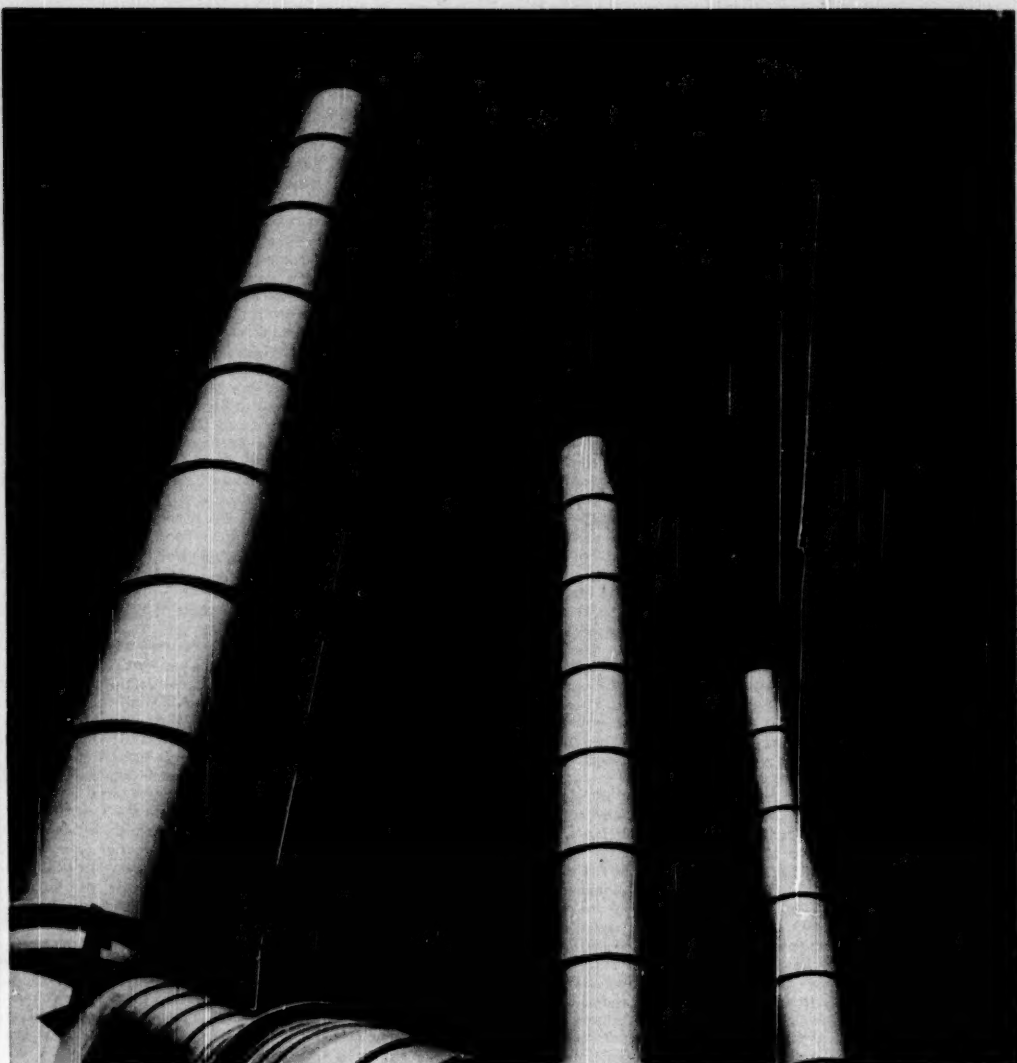
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These 16-ft. diam. by 200-ft. high smokestacks are located at a large steam generating plant. They are typical examples of the specialized steel plate structures we can furnish to meet the requirements of power generating stations, mines, mills and industrial plants of all kinds.

These three stacks were erected one at a time and the fourth is now being fabricated. Duplicate

installations like this are, in effect, a testimonial of our ability to serve our customers well.

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LITTLE GRAINS OF SAND

*"Little drops of water, little grains of sand,
Make the mighty ocean, and the pleasant land."*

Still Tops. Ted Williams, the Boston Red Sox slugger, is reported to have signed the highest salaried contract in baseball history—for an estimated \$125,000. Babe Ruth's \$80,000 salary in 1930 and '31 was tops in the old days. But if Ted Williams, after he pays taxes, were to have as much buying power in 1950 as Babe Ruth had in 1931, he would have to be paid \$327,451.

Good Example. Canada, like us, operated at a deficit throughout the war. And again like us Canada ended the war with a huge national debt and all the other symptoms of fiscal misery. But after the war, Canada made a basic decision in fiscal policy. As soon as hostilities ceased, Canada embarked on a program to put her fiscal house in order with the result that since 1947, annual budgets in Canada have shown a surplus each year and since 1946, Canadian taxes have been decreasing steadily. Five post-war tax reductions saved Canadian taxpayers about 43 per cent of Canada's peak war revenues. And here is an important point in connection with the five tax decreases in Canada. Although the saving to Canadian taxpayers amounted to a billion dollars, actual tax revenues paid to the government fell only \$400 million. In other words, a good fiscal policy typified by reduced taxation and spending has bolstered the Canadian economy to such an extent that lower tax rates produced \$600 million more than might have been expected.

More Perjurers? The news that Mr. Bridges has been convicted on charges of having concealed his Communist affiliation in applying for citizenship ought to serve as a memory-jogger for the Government attorneys who started out nearly two years ago to enforce the Taft-Hartley Act's anti-Communist provisions. Mr. Bridges has one of those affidavits on file with the National Labor Relations Board. So have the officers of several other notoriously pro-Communist unions. Because the Government has not even attempted to prove otherwise, the non-Communist affidavit is being turned into a sort of free ticket to respectability for those unions it was obviously intended to bar from Federally-sanctioned labor-management relations.

Irrational Rationing. Have you ever noticed how planners do wonderfully well at planning austerity and find nothing so disconcerting as the least hint of abundance?

In England, stocks of most foods are now large enough to permit increases in rations. But, says a *New York Times* dispatch, this pleasant development puts the government in "a peculiar situation." There's a question "whether the government can afford to let the nation eat more" because, in Britain all rationed foods are heavily subsidized by the government. Bigger rations would mean heavier subsidies, and Sir Stafford Cripps, the budget manager, says the treasury can't afford that. It's a peculiar situation. The government started its rationing and subsidy program for the announced purpose of helping the people get food during a period of shortages. Now that the shortages of most foods are ended the government cannot afford to let the people have a better diet.

Undermining Confidence. With the government apparently unable to keep its own financial house in order, how long will the American public care to hold on to the bonds they now have, to say nothing of loading themselves up with new issues? Right now the public sells about as many bonds each month as it buys. Prudent men do not invest in a wasting asset, if they know the waste is going on and more of it is planned, or if they realize that the purchasing power of bonds, plus interest, at maturity will be less than the purchasing power of the dollars they invest in them today. A wise and statesmanlike government would be sensitive to its customer reactions and not wait until a flight from bonds takes on panic proportions.

Gold Does Not Lie. Monetary history teaches that there never has been a permanent suspension of specie payments. The reason is that paper is no better, in the long run, than the value of the promise made by the promiser. Such promises have a notoriously poor record. Many governments have attempted to put men's

(Continued on page 25)

Governments find it easy to make
the rich poor, but impossible to make
the poor rich.

Let your records tell you!



It's no news that the true cost of wire rope cannot be reckoned by purchase price alone. As we've so often pointed out, the real cost is the cost per unit of work it does.

In the case of Bethlehem rope, this figure will be *low*, and you will therefore have an economical rope. But we strongly suggest that *you* prove this to your own satisfaction. Keep some simple records; something to show, for instance, the rope costs per

ton-mile in oil-country drilling . . . or per car of coal hauled up a slope . . . or per cubic yard of rock moved, etc. Pick the most convenient unit of work applicable to your business. It isn't at all difficult or complicated.



Then, study your records every so often. They'll tell you, far more convincingly than we can, that Bethlehem wire rope is an *economical* rope.



BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation
Export Distributor: Bethlehem Steel Export Corporation

LITTLE GRAINS OF SAND

(Continued from page 23)

promises to pay on a par with gold without using gold to fulfill those promises; but, in due course, such attempts are subjected to the acid test of their value as against fulfillment in gold, and failure in part, or fully, is the common result. Gold, on the other hand, is free of these weaknesses of human beings. It carries fulfillment in settlement in accordance with the weight and fineness of the amount of gold employed. It does not falsify. Its value does not depend on the promise of any man.

New Roads to Success. The old routes to top jobs in large corporations via the sales, engineering, production and technical departments don't carry their former traffic. Lawyers, accountants, publicists, tax experts and government contact men appear to be strengthening their hold on the field of business management. With the federal government constantly extending its so-called services, the big corporations must improve their defenses. Those best equipped to defend business against government encroachment are the professional men. Their rise in the business management field is proof of the importance of this job to the big corporations. Also, the life of free business depends on the selling job these key men do in bringing the merits of free enterprise to the voting public.

Old Men of the Sea. Present labor demands, and the increase in costs which they would bring about, are centered heavily on pensions. It would be interesting to know how many labor leaders have ever asked themselves whether in forcing up industrial costs to care for pensioned workers they may be reducing the opportunity for employment of the younger people coming into the labor force. Yet that may be the result, if the encroachment of costs on earnings causes curtailment of industrial expansion.

Mañana. "The balance sheet of the nation is anything but favorable. As a matter of fact, if the United States were a private enterprise, any bank cashier, or any man in the country, would refuse to lend the government another dime," said Chairman Cannon of the House Appropriations Committee on the floor of the House. He continued: "The expenditures for the current year, and coming year, are billions of dollars in excess of national income. We carry a staggering public debt, unparalleled in history, of more than a quarter of a trillion dollars, a sum so large as to be utterly incomprehensible to the finite mind of man. And we are increasing it by huge sums every year. When can we expect to pay it?"

Bible Lesson. Solomon and Rehoboam have been on my mind for weeks. Solomon was the original tax-and-spend leader. He came to the presidency of his country cultured, schooled and wealthy. He felt he had a right to do as he pleased with the historic forces of his land. Under his program of tax and spend the appear-

ances of prosperity were present but the heart of prosperity was missing. The burdens of the people increased and they were asked to accept them as blessings. In due time Solomon died, and his son Rehoboam came to power. He spurned the advice of the elders of Israel. He listened to the young men who knew all the answers to all the social questions of that day. The successor to Solomon increased the taxes and continued the program of wasteful spending. The result was the death of the nation. Well, America's Solomon is dead and Rehoboam is in the White House. Our modern Rehoboam has turned his back on the elders of America and has listened to the young men who know all the answers, and who are thoroughly sold on the program of tax and spend. If the present policies are continued another five years I see no hope for the continuance of the American Way of Life.

—Excerpt from a sermon by DR. WALTER R. COURTENAY
Pastor, First Presbyterian Church, Nashville, Tenn.

Oil and Water. Advocates of government confiscation of the states' tidelands say the oil companies prefer that these properties remain under state control because they can make better terms with the state governments than they would be able to make with a watchful, alert federal government. This is sheer nonsense. Federal bureaucracy is no more vigilant in protecting the public interest than state bureaucracy, and probably, in about nine times in 10, is less vigilant. Governor Shivers of Texas, commenting on this subject, says: "The oil companies don't care whether Texas or the federal government owns the tidelands. The real issue is the principle of our inherent fights to self-government."

Special Privilege. The recent coal crisis at least has served one useful purpose. It has given one more demonstration of the inadequacy of existing law to safeguard the public interest in industrial disputes particularly when the law is in the hands of an unsympathetic administration. There was arrogance and defiance of law by union leaders, and negligence on the part of law-enforcement authorities. But underlying everything is a collective bargaining system that has repeatedly shown itself to be extremely dangerous, and also to be beyond the reach of existing law. The real, basic trouble can be stated in the one word monopoly.

Financial Insanity. In 1932, Franklin D. Roosevelt, then a presidential candidate, had this to say about government spending: "Any government, like any family, can for a year spend a little more than it earns. But you and I know that a continuance of that habit means the poorhouse."

In 1932, our Federal government spent $4\frac{1}{2}$ billion dollars. For the fiscal year of 1950, it is estimated that our Federal government will spend ten times that amount—45 billion dollars. Isn't it as true today, as it was in 1932, that "a continuance of that habit means the poorhouse"? According to the figures, it is ten times as true.

Close-Up of America's No. 1 Furnace

No, this isn't a flood of volcanic lava, but red hot coke being thrust from a coke oven just before being rolled into a quenching tower where it will be cooled by air or by thousands of gallons of water.

You already know that coke provides the carbon that makes raw ore into iron. But you may be surprised to learn that at the same time these ovens are baking coke from bituminous coal, they're also distilling the chemical elements which go to make products like nylon, aspirin, perfume, sulfa drugs, synthetic rubber and almost 200,000 other things.

To provide coal of dependable quality, in volume and at reasonable cost, for coke ovens, railroads, electric power plants, factories, offices and homes, the bituminous coal industry has invested hundreds of millions of dollars in the past ten years. Some of it has paid for new mines and mining machinery. But a lot of this money has helped build huge mechanized coal preparation plants in which coal is washed, graded, blended and treated to meet the needs of different types of coal burning equipment. That's why industry and coal consumers are finding that this specially prepared coal is the most dependable and economical of fuels.



BITUMINOUS **COAL**

BITUMINOUS COAL INSTITUTE

A DEPARTMENT OF NATIONAL COAL ASSOCIATION

WASHINGTON, D. C.

Modernizing America's bituminous coal mines has meant replacing "pick-and-shovel" mining with machines. Today more than 91% of production is mechanically cut and 60% is mechanically loaded. As a result the worker in a modern mine is less and less a "miner," more and more

a skilled machine operator. Largely as a result of this modernization, the American miner's average daily output is five times greater than that of the British miner—and the American miner's take-home pay is higher than that paid by any other major American industry.

BITUMINOUS COAL . . . LIGHTS THE WAY . . . FUELS THE FIRES . . . POWERS THE PROGRESS OF AMERICA



"What Enriches the South Enriches the Nation"

It's Later Than You Think

The men who drafted the first ten amendments to our Constitution, those amendments known as the Bill of Rights, thought of private ownership of property as a right which was necessary to protect the right to personal liberty from an arbitrary government and the kind of creatures such a government spawns. They may, and probably did, also recognize the fact that private ownership of property, with the sense of personal responsibility that goes with it, would act as a salutary restraint on any temporary emotions of a free electorate.

This is why the Fifth Amendment, part of the original Bill of Rights, listed property along with life and liberty as among those ultimately precious things with which the Federal Government was forbidden to tamper "without due process of law." It is why the Supreme Court of the eighties, in alignment with this earlier view, construed the Fourteenth Amendment to apply the same restraints to state governments.

But with the apparent disappearance of our physical frontiers, with the increasing complexities of our modern society and the development of giant corporations this constitutional conception of the trinity of fundamental rights—life, liberty and property as one and indivisible—began to dissolve. Some of the weaklings among us lost confidence in ourselves as divinely inspired individuals, and, under the insidious influence of attractive sounding socialist promises, were tempted to think that it might be a good idea to lean on the shoulder of a paternal uncle.

Then, twenty years ago, came the depression, followed by the Presidential election of 1932. This election swept into power a candidate pledged to the best and sanest platform conceivable. This platform was completely and brazenly repudiated by the newly elected

President almost immediately after his inauguration. For it were substituted the provisions of the platform of the Socialist Party; deliberate circumvention of constitutional government was launched, and the right of private ownership in property, unwittingly abrogated by the passage of the 16th Amendment in 1913, undermined.

Next came the politically appointed termites, slyly boring from within, who, by flattery in high places, and by innuendo and propaganda for popular consumption, continued, and are continuing, the weakening of our Constitutional structure. They originated the false notion that human rights were separate from property rights, and that, in some way these loose thinkers neglected to explain, property rights were antagonistic to and would destroy human rights, unless they were made secondary to all other human rights. As everyone knows, a secondary or subservient right is no right at all.

With the false new idea of "human rights versus property rights" sloganized and popularized, the American Fabians really went to work on our public. From the TVA of the '30s to socialized medicine today, their proposals for social, political and economic changes in existing institutions have had two things in common: increasing centralization of authority over the personal property of our citizens, and the alleged improvement of the material status of the "underprivileged." The first of these aimed at more power for bureaucrats; the second at perpetuating that power by subsidizing the ballot.

Not until we as a people look askance at any socialist scheme and its proponents, no matter how glittering the promises, will we be safe from a danger that is greater than a world full of external enemies.

"The Best is Yet to Come"

In a talk before the Southeastern Chapter, Robert Morris Associates at Charleston, S. C., on April 3, Homer M. Pace, vice president of the South Carolina Power Company, and an outstanding leader in developing the South industrially, recounted the following well known story that was told originally by Henry Grady.

"I attended a funeral once in Pickens County in my state. It was a poor 'one gallus' fellow, whose breeches struck him under the armpits and hit him at the other end about the knee. . . . They buried him in the midst of a marble quarry; they cut through solid marble to make his grave; and yet a little tombstone they put above him was from Vermont. They buried him in the heart of a pine forest, and yet the pine coffin was imported from Cincinnati. They buried him within touch of an iron mine, and yet the nails in his coffin and the iron in the shovel that dug his grave were imported from Pittsburgh. They buried him by the side of the best sheepgrazing country on the earth, and yet the wool in the coffin bands themselves were brought from the North. The South didn't furnish a thing on earth for that funeral but the corpse and the hole in the ground. There they put him away and the clods rattled down on his coffin, and they buried him in a New York coat and a Boston pair of shoes, and a pair of breeches from Chicago and a shirt from Cincinnati, leaving him nothing to take into the next world with him to remind him of the county in which he lived, and for which he fought for four years, but the chill of his blood in his veins and the marrow of his bones."

In the last fifty years, great strides have been made in the industrial development of this region and, in fact, as is pointed out elsewhere in this issue, the South's progress in the last quarter century has bordered on phenomenal. If Henry Grady were alive to witness a funeral in Pickens County, or any other Southern county for that matter, today, and run through the same list of terminal accoutrements, he would no doubt be both highly encouraged and extremely pleased—and with good reason. The tombstone would have been both quarried and finished in Georgia or Alabama, for instance. He could easily trace the pine coffin to a Southern manufacturer, and could do the same as far as the nails and shovel are concerned. The shoes could have come from Maryland or North Carolina, for example, and, of course, the raw materials and finished products of cotton and wool come from many Southern states.

This comparison certainly represents tremendous progress and yet, quite obviously, as mid-century statistics reveal, there is at least as much still to be done.

The lack of fully developed productive facilities for finished products stands as an incomparable opportunity for further industrial development of the South and what now represents the most vulnerable spot in the region's industrial make-up can become its greatest asset. This is particularly true of the metal-based industries. With all its store of virgin lead and zinc, iron ore and bauxite and lacking only copper among the important raw material ingredients, the South turns out just a little more than fourteen per cent of the nation's supply of manufactured primary metals. To be in balance with the rest of its manufactured output, this production should represent at least twenty-one per cent of the national total, and, because of the favorable raw material situation, could represent even more. In fabricated metal products, embracing a number of consumer goods, and considerably greater quantities of industrial goods, only twelve per cent of the nation's needs are fabricated in the South. This represents a fifty per cent deficiency when measured by other manufacturing production.

These examples hint at the magnitude of the reward that awaits the completion of the job that lies ahead. Recent events give an indication of a changed industrial pattern, at least in so far as steel is concerned, in the not too distant future. Within the past month or so, Bethlehem Steel has announced a thirty million dollar expansion program for its Sparrows Point, Maryland plant; and U. S. Steel has announced its intention of putting a steel plant in the Philadelphia area. The location of new steel plants and the expansion of already existing facilities on Tidewater is a direct result of the depletion of the Mesabi range. Further indication of this basic shift in location is afforded by the announcement that the South American ore to be shipped to this country will enter through Gulf ports and the ports of Baltimore and Philadelphia for the most part. It is reasonable to assume that the location of steel plants on Tidewater and in the South will attract to these areas many of the nation's major steel consuming industries. We might well ask why, under such circumstances, would the automobile industry remain centered in Detroit?

That the job can be done is proved from past experience. It will take keen financial leadership and promoting ingenuity, and in the accomplishment of this objective another problem might well be solved. This is the problem of retaining, for the benefit of themselves and their birthplaces, the hundreds of technical and executive specialists that migrate each year because they cannot find suitable outlets for their talents.

South Closing Economic Gap As Century Passes Mid-Point

By Caldwell R. Walker

Editor, "Blue Book of Southern Progress"

WITH the dawn of last New Year's Day, the United States entered the second half of a century noted beyond all predecessors for economic progress.

A new milestone in the Nation's development is being passed; a fit time for industrial leaders to give some thought to what may lie ahead.

Crystal balls are many, and predictions for on-coming years are varied. They run the gamut from Utopian achievement to dire calamity.

The crystal ball of the future, however, is a highly fallible device—unless used in combination with the magic mirror of the past.

The ensuing analysis will endeavor to effect such a combination. It will evaluate progress already made in the first half of the twentieth century, with a view to throwing light on what may be expected to develop in the second half.

South's Progress—Southerners find justifiable pride in economic progress made over recent years. Few perhaps realize, however, that the upsurge of Southern industrial development is a matter of relatively recent times.

Viewed over the entire fifty-year span of the present century, there will be found little variance between gains made by the South and those made by the country as a whole in real economic advancement.

By real economic advancement is meant advancement measured from a per capita basis.

Real progress in matters economic is relative to people. No matter how many or how few facilities of life may be concentrated within a given area, their true measure of value is to be found in relation to the number of people for whom they perform service. Benefit per person is the most realistic indicator of economic status and progress.

Measuring Stick—In order to measure the changes that have occurred regionally and otherwise since the turn of the century, most reliable data are to be found in the records of the U. S. Bureau of the Census.

Among these records, those covering manufacturing, agriculture, and population are the only ones going back to 1900 without serious gaps and discrepancies.

It should be noted in choosing these indicators, that some states will suffer from the comparison in certain respects. Many states, and particularly some in the South find bulwarks of progress in other industries, without which their overall status cannot be measured completely.

Such states, for example, are Arkansas, Mississippi, Louisiana and Texas, which realize vast proportions of income from

gas and oil production; and Florida which has built up tremendous income from services contingent upon tourism.

Mechanical Industrialization—Since, however, greatest effort of the twentieth century has been centered upon mechanical industrialization, there is merit in analyzing regional progress that has been made in this particular direction, more as an indicator of what may be likely in the future than as a mere review of water over the dam.

Moreover, since greatest mechanization has occurred in the fields of manufacturing and farming, these two industries in combination can serve as worthwhile measures of progress.

Transition that has taken place during the past half century, is most clearly seen in tabular form. Table I, below, shows the record of the 16 states grouped as the South in the "Blue Book of Southern Progress".

It can be easily seen from the foregoing that the South as a region just about parallels national progress when the full fifty-year span is considered. There are exceptions in both directions as to individual states; some outgrew the Nation in income from productive output; some fell somewhat below the national average.

South's Growth Not Uniform—As indicated early in this analysis, however, growth of the South was not uniform

over the entire half century. Even as late as 1900, Southern states were still feeling some of the smart resulting from a bitter war fought on its own soil. Without benefit of Marshall plans and such types of aid from other nations or regions, the South's climb from the abyss of military devastation was slow and difficult. During the first quarter of the present century, progress actually lagged below that of the rest of the Nation.

With the beginning of the third decade, however, the region began to assert its fundamental economic strength and to step out in aggressive competition for the dollar income of the Nation.

During the depression the South's decline was less severe than that of other regions; its recovery was swifter; and its progress thenceforth was at a swiftly accelerated rate. During the last decade of the first half of the century, it easily counterbalanced the lag of the first quarter and established itself as a new industrial center of the United States.

The following summary tables show the record for the second quarter of the century:

Table II

1929				
Income				
	Pop.	Mfg.	Agr.	Per
	Mil.	Mil.	Mil.	Cap. \$
South ...	41.2	3,066.0	2,471.0	144
Others ..	81.6	18,871.0	4,067.0	281

1949				
Income				
	Pop.	Mfg.	Agr.	Per
	Mil.	Mil.	Mil.	Cap. \$ Gain
South ...	49.1	10,564.2	7,392.9	366 254%
Others ..	99.6	51,009.0	11,713.9	630 224%

(Please Turn Page)

Table I.
Half-Century Industrial Gains Based on Per
Capita Income from Manufacturing and Farming
Combined.

	1900					1949				
	Income			Per	Cap.	Income			Per	% Gain
	Pop.	Mfg.	Agr.			Pop.	Mfg.	Agr.		
	Mil.	Mil.	Mil.	Mil.	\$	Mil.	Mil.	Mil.	\$	
Ala. ...	1.8	\$32.8	\$91.4	\$124.2	\$69 2.9	\$689.5	\$349.2	\$1,038.7	\$358 419	
Ark. ...	1.3	19.7	79.6	99.3	76 2.0	206.5	464.3	670.8	335 341	
D. C. ...	.3	17.0	.9	17.9	50 .9	86.9	—	—	86.9 97 64	
Fla. ...	.5	18.8	18.3	37.1	74 2.5	262.2	267.0	549.2	220 197	
Ga. ...	2.2	43.2	104.3	147.5	67 3.2	748.0	421.7	1,169.7	366 446	
Ky. ...	2.1	51.8	123.7	175.1	83 2.9	478.0	475.1	953.1	329 296	
La. ...	1.4	30.9	72.7	103.6	74 2.6	479.5	294.3	773.8	298 303	
Md. ...	1.2	81.0	43.8	124.8	104 2.2	954.4	144.1	1,098.5	500 382	
Miss. ...	1.6	17.2	102.5	119.7	75 2.1	214.2	442.8	657.0	312 316	
Mo. ...	3.1	129.1	219.3	348.4	112 3.9	1,283.4	680.0	1,963.4	504 350	
N. C. ...	1.9	32.7	89.3	122.0	64 3.9	1,176.4	655.7	1,832.1	470 635	
Okla. ...	.8	4.0	73.1	77.1	96 2.3	221.9	460.1	682.0	297 209	
S. C. ...	1.3	21.6	68.3	89.9	69 2.0	588.1	255.8	843.9	422 512	
Tenn. ...	2.0	38.0	106.2	144.2	72 3.2	732.5	401.3	1,133.8	355 393	
Tex. ...	3.0	46.2	239.8	286.0	95 7.5	1,168.6	1,591.6	2,760.2	369 288	
Va. ...	1.9	45.0	86.5	131.5	69 3.1	749.5	357.2	1,106.7	357 417	
W. Va. ...	1.0	27.9	44.8	72.7	73 1.9	524.6	112.7	637.3	336 360	
South ...	27.4	656.9	1,564.1	2,221.0	81 49.1	10,564.2	7,392.9	17,957.1	366 353	
Others	48.8	3,966.7	2,742.2	6,608.9	138 99.6	51,009.0	11,713.9	62,722.9	630 355	

Industrial Migration—Since the current era is known to be one involving considerable migration of industry, from region to region, of the United States, an analysis of this type would not be comprehensive unless some light were thrown on the nature of such migration, and the directions in which it tends to trend.

While migration of manufacturing to the South has become intensified as the century has advanced, it has by no means been a condition of most recent years alone. Textiles, chemicals, tobacco, furniture, and lumber began their swing southward in the early years of the century.

Other regions, likewise, have profited from shifts in industrial centers; while still others have felt the brunt of the movement.

New England, for instance, dropped from its position of leadership, yielding first place to the East North Central region as the latter capitalized mightily on its newly established automobile industry.

Table III shows changes by regional groupings used by the Bureau of the Census:

The Job Ahead—In conclusion, and in address to all Southerners who are co-partners in the campaign to make the South a more prosperous region, some reminders are in order:

Inasmuch as gains approaching phenomenal have been made by the South in most recent years, it has become a practice to assume somewhat smugly that the region is doing all right for itself.

This in fact is true at the moment. Immediate and near-past records justify a feeling of pride.

However, the junkyards of history are filled with the wreckage of overcomplacency, and considerable peril lies in the direction of taking too much for granted.

Over the entire past half century, the South has just about held its own, even though it may have bettered this level in latter years.

Furthermore, while the South has been forging forward, other states have by no means been sleeping. Some very impressive events have been taking place in other sections of the country—events which may likely foretell even more impressive results in years to come.

One thing to remember above all others is that the South fails by far to produce sufficiently for its own market, the finest market, by the way, in the entire world right now.

Semi-finished goods are turned out in profusion in the South. Finished commodities, however, are being imported from other sections in vast quantities.

So long as this remains a reality, Southern income is going to suffer the loss contingent upon a poorly integrated production-market status.

The South needs more production—but it should be production for Southerners.

Until such consummation is achieved, Southern income, aggregate and per capita, cannot travel on a par with other industrialized sections that perform in accordance with this prime requisite.

Table III
Regional Shifts in Rank Based on Per Capita Income from Manufacturing and Farming

1900					1949				
Pop.	Inc.	Cap.	Comb. Per		Pop.	Inc.	Cap.	%	
Mil.	\$ Mil.	Inc.	\$	Region	Rank	Mil.	\$ Mil.	Inc.	Gain
5.5	\$919.3	\$167		New England	1	E. North Cent.	30.3	\$2,542.0	\$771 467
10.3	1,588.9	154		W. North Cent.	2	New England	9.3	6,484.0	697 317
2.4	354.7	148		Pacific	3	Mid Atl.	29.9	18,774.4	628 349
15.5	2,172.1	140		Mid Atl.	4	W. North Cent.	13.9	7,445.9	536 245
16.0	2,197.9	137		E. North Cent.	5	Pacific	15.0	6,413.2	428 190
1.6	209.5	131		Mountain	6	Mountain	4.8	1,838.1	383 193
6.5	566.0	87		W. South Cent.	7	South Atl.	20.0	7,513.0	376 415
7.5	563.2	75		E. South Cent.	8	E. South Cent.	11.1	3,782.6	341 355
10.5	769.2	73		South Atl.	9	W. South Cent.	14.4	4,886.8	339 290
75.4	8,829.9	117		United States			148.7	80,680.0	543 364

Table IV
Half-Century Shifts in State Rank Based on Per Capita Income from Agriculture and Manufacturing Combined.

1900					1949				
Pop.	Comb.	Cap.	Per		Pop.	Comb.	Cap.	Per	
mil.	Inc.	Inc.	Inc.		mil.	Inc.	Inc.	Inc.	
2	\$51.3	\$256		Montana	1	Connecticut	2.0	\$1,851.1	\$925
3	67.6	225		N. Dakota	2	Rhode Island	7	591.3	845
4	81.8	205		Rhode Island	3	Michigan	6.4	5,289.8	827
3	57.8	193		Vermont	4	Illinois	8.5	6,553.1	771
9	172.4	191		Connecticut	5	Ohio	8.0	6,158.8	770
2.2	420.8	191		Iowa	6	Indiana	4.0	3,038.5	760
11	197.6	180		Nevada	7	Wisconsin	3.4	2,501.8	736
4	70.0	175		Nebraska	8	New Jersey	4.9	3,537.8	722
4	67.9	170		S. Dakota	9	Iowa	2.6	1,755.2	675
1.5	247.3	165		New Hampshire	10	Massachusetts	4.7	3,073.5	654
2.8	451.6	161		Kansas	11	Delaware	3	188.7	629
1	15.4	154		Massachusetts	12	Pennsylvania	10.6	6,548.8	618
1.5	230.3	154		Arizona	13	New York	14.4	8,687.8	610
4.8	734.6	153		California	14	Montana	5	293.6	588
7.3	1,055.3	145		Illinois	15	S. Dakota	6	346.2	577
1	14.1	141		New York	16	N. Dakota	6	329.9	550
1.7	237.2	140		Wyoming	17	N. Hampshire	6	310.5	518
4	55.8	139		Minnesota	18	Maine	9	465.5	518
6.3	866.0	137		Oregon	19	Minnesota	3.0	1,544.8	515
5	68.6	137		Pennsylvania	20	Nebraska	1.3	663.8	511
4.2	572.0	136		Washington	21	Missouri	3.9	1,963.4	504
2.5	334.5	134		Ohio	22	Maryland	2.2	1,098.5	500
2.1	278.5	132		Indiana	23	Idaho	6	297.2	495
1.9	250.8	132		Wisconsin	24	Vermont	4	192.1	481
5	64.7	129		New Jersey	25	N. Carolina	3.9	1,832.1	470
2	25.8	129		Colorado	26	Kansas	1.9	842.6	444
7	87.8	125		Delaware	27	California	10.7	4,634.5	433
2.4	278.3	116		Maine	28	Oregon	1.7	732.7	431
3.1	348.4	112		Michigan	29	Colorado	1.2	511.7	426
1.2	124.8	104		Missouri	30	Wyoming	3	126.6	422
2	19.9	100		Maryland	31	S. Carolina	2.0	843.9	422
8	77.1	96		Idaho	32	Washington	2.6	1,046.0	403
3.0	286.0	95		Oklahoma	33	Texas	7.5	2,760.2	369
2.1	175.1	83		Texas	34	Georgia	3.2	1,169.7	366
3	23.9	79		Kentucky	35	Alabama	2.9	1,038.7	358
1.3	99.3	76		Utah	36	Virginia	3.1	1,106.7	357
1.6	119.7	75		Arkansas	37	Tennessee	3.2	1,133.8	355
5	37.1	74		Mississippi	38	W. Virginia	1.9	637.3	336
1.4	103.6	74		Florida	39	Arkansas	2.0	670.8	335
1.0	72.7	73		Louisiana	40	Kentucky	2.9	953.1	329
2.0	144.2	72		W. Virginia	41	Mississippi	2.1	657.0	312
1.0	131.5	69		Tennessee	42	Louisiana	2.6	773.8	298
1.3	89.9	69		Virginia	43	Oklahoma	2.3	682.0	297
1.8	124.2	69		S. Carolina	44	Arizona	7	204.1	292
2.2	147.5	67		Alabama	45	Utah	7	197.4	282
1.9	122.0	64		Georgia	46	New Mexico	6	164.9	275
2	12.7	64		N. Carolina	47	Florida	2.5	549.2	220
3	17.9	59		New Mexico	48	Nevada	2	42.6	213
75.4	8,829.9	118		Dist. Columb.	49	Dist. Columb.	9	86.9	97
				United States			148.7	80,680.0	543

Growth of rubber manufacturing gives South big new industry

A good deal more synthetic GR-S rubber will be needed in the years to come, and the South is indeed fortunate that the industry has located, for the most part—nine-tenths of total production—within its borders.

By Sidney Fish
Industrial Analyst

THE South is rapidly becoming a strategic center of the rubber manufacturing industry. Not only have the leading rubber and tire manufacturing companies established many vital plants throughout the South, in the last ten years, but the South has become the center of production for over nine-tenths of the nation's synthetic rubber.

Because of the rise in prices of natural rubber in recent months, and the possibility that war would again shut off sources of natural rubber in the Far East, synthetic rubber is again in the spotlight as a critical material. Tire manufacturers can buy synthetic GR-S rubber at the Government price of 18.5 cents a pound, whereas spot natural rubber has recently been selling at close to 23 cents a pound, or over 25 per cent above the price of last December. Since synthetic rubber approaches crude in quality, for many uses, stimulus is being given to greater activity in the South's synthetic rubber industry, entirely aside from this year's heavy demand for tires and other rubber products. At present tire plants are operating at capacity, and rubber consumption this year should be at least 5 per cent over 1946.

Factors Encouraging Development—Originally, when the tire industry set out to decentralize, it found in the South efficient labor and friendly government. Today, many other factors are encouraging the development of rubber and tire factories in Southern states. Important raw materials—cotton, rayon, nylon, carbon black and synthetic rubber are close at hand. The market for original equipment of new cars as well as for replacement tires has expanded greatly, owing to the rapid growth in the South's ownership of cars and trucks.

To make tires in the North for use by Southern consumers would mean a wasteful haul of all of the vital raw materials, including synthetic natural rubber, to Akron and other inland centers of production, and the return haul of the finished tires and tubes to Southern centers of consumption. The rubber industry has avoided such waste by decentralizing.

More and more auto assembly plants are being set up in the South. Car ownership is showing the biggest gains there of any area in the country. It was a foregone conclusion therefore that the rubber industry would expand in the South. Nearly all of the plants have been built

since 1940. The growth since the end of the war has been more rapid than at any other time. Many of the older plants have been enlarged since 1945.

Plants—Representative of the newer larger plants is the tire and tube plant of B. F. Goodrich Company at Miami, Okla., which has been in operation for five years. There Goodrich is employing 1,000 men and women, with an annual payroll in excess of \$4,000,000.

This plant is the second largest tire plant operated by B. F. Goodrich. It is outranked only by the huge plant in Akron. In Miami, since 1945, Goodrich has made 10,700,000 tires and the same number of tubes while paying out \$14,250,000 in wages and salaries. Output has totaled 800,000,000 pounds of product. The plant has been expanded 100 per cent once and 7 per cent a second time.

All of the major rubber companies are operating several plants in the South. The operations are well integrated, including textiles, synthetic rubber tires and tubes, footwear and other products.

Plant locations and principal products of major rubber companies in Southern states follow:

The B. F. Goodrich Company
Louisville, Ky., two plants, plastics and geon resins
Clarksville, Tenn., soles and heels
Silvertown, Ga., textiles
Tuscaloosa, Ala., tires and tubes
Miami, Okla., tires and tubes
Port Neches, Texas, synthetic rubber (government plant)

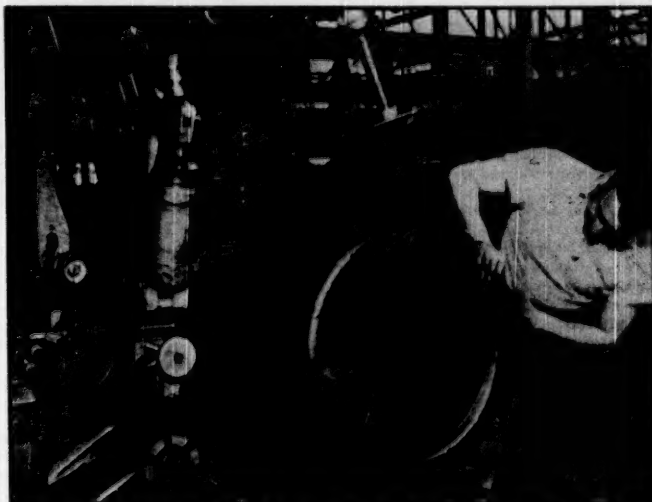
Goodyear Tire and Rubber Co.
Gadsden, Ala., tires and tubes
Rockmart, Ga., textiles
Decatur, Ala., textiles
Cartersville, Ga., textiles
Cedartown, Ga., textiles
Houston, Texas, synthetic rubber (government plant)

Firestone Tire and Rubber Co.
Memphis, Tenn., tires and tubes
Gastonia, N. C., textiles
Bennettsville, S. C., textiles
Lake Charles, La., synthetic rubber (government plant)

United States Rubber Co.
Milan, Tenn., footwear and general products
Burlington, N. C., textiles
Gastonia, N. C., textiles
Hogansville, Ga., textiles
Scottsville, Va., textiles
Shelbyville, Tenn., textiles
Winnsboro, S. C., textiles
Borger, Texas, synthetic rubber (government plant)

General Tire and Rubber Co.
Waco, Texas, tires and tubes
Baytown, Texas, synthetic rubber
Armstrong Tire and Rubber Co.
Natchez, La., tires and tubes
Copolymer Corp.

Baton Rouge, La., synthetic rubber
People Employed in Southern Plants—
Extent of employment provided by the rubber industry in the South is provided by a breakdown of B. F. Goodrich's operations. In all, 5,600 are currently employed by that company in seven plants.
(Please Turn Page)



GOODRICH EMPLOYEE shown here is turning plies over heads on heavy-duty truck tires at Miami, Okla., plant of B. F. Goodrich Company

In addition to the 1,000 at Miami, Okla., Goodrich has 700 employed in two plants in Louisville, which make goon polyvinyl materials in all forms—resins, latices, plastics, paste-forming resins and special purpose Hycar man-made rubbers. The materials made there form the basis for many well-known finished commercial products. These plants were bought from the Government in 1942 and 1946.

At Martha Mills, Silvertown, Ga., Goodrich employs more than 2,000 in the largest plant in the world processing cotton, rayon and nylon into cords used in tires, hose, belts and other products. The mill was built in 1928.

At Clarksville, Tenn., Goodrich employs 450 on shoe products, chiefly soles and heels. The plant was opened in 1939.

Comparable in size and layout to Miami, the new Goodrich tire and tube plant in Tuscaloosa, Ala., was opened in December, 1946. Here over 1,000 are employed.

Finally, at Port Neches, Texas, Goodrich operates for the United States Government the largest plant making man-made rubber in the world. The plant first made synthetic or GR-S rubber in 1943. When the United States was cut off from its natural rubber supply by the Japanese attack on the East Indies, plants like this kept our armed forces rolling. One-half of the plant is now idle or in "standby."

It is significant that Goodrich recently stepped up the output of the active part of the plant from 65 to 85 per cent of capacity.

At Port Neches, where 450 are employed, Goodrich specializes in producing that new wonder, "cold rubber," by the continuous process. This development has improved the wearing quality of GR-S synthetic tires to such an extent that they now outwear natural rubber. Cold rubber was developed when it was found that the mixture of butadiene and styrene result in an improved product if they are cooled to 41 degrees F. before being put into the reactor.

The giant U. S. Rubber Company similarly operates many facilities in the South. Footwear and general products plants at Burlington, N. C., and Milan, Tenn., employ 650 workers. Eight textile plants in Georgia, North Carolina, South Carolina, Virginia and Tennessee employ over 4,000 workers. And at Borger, Texas, U. S. Rubber operates a large Government-owned synthetic rubber plant employing 450. In all, U. S. Rubber employs about 5,200 in the South.

When operating at capacity, the Borger plant will produce 100,000,000 pounds of rubber yearly. To produce that much natural rubber would require at least 100,000 acres of rubber trees and the services of 24,000 workers.

Goodyear Tire & Rubber Company has 350 employees at its synthetic rubber plant at Houston, Texas. The Gadsden, Ala., tire, tube and shoe product plant is the largest Goodyear facility outside of Akron. It is now 20 years old. At Houston, Goodyear operates a Government-operated synthetic rubber plant, which played a part in developing cold rubber. Four textile plants are operated by Goodyear

in Alabama and Georgia. Rayon and nylon output have been stepped up sharply by the company in the last year.

Today more than 40 per cent of the 1,000,000 tons of rubber consumed annually by the United States is made in the nation's synthetic rubber plants located almost exclusively in the South. With Russia stockpiling natural rubber in increasing quantities, and making threatening gestures towards the East Indies through Communist-dominated countries, the synthetic rubber industry of the South is a precious asset to the nation. For if war came, it could double its output, and meet the nation's needs.

In addition to the synthetic plants already named at Borger, Port Neches and Houston, those currently being operated in the South include **General Tire's** plant at Baytown, Texas, **Firestone's** plant at Lake Charles, La., and the **Copolymer**, Corp. plant at Baton Rouge, La. Copolymer is jointly owned by half a dozen small rubber companies.

In all, the seven co-polymer or GR-S plants in the South account for 285,000 tons capacity of the nation's total of 345,000 tons. Invested in those plants is about \$72,000,000.

In addition, two standby GR-S plants are in the South which could be operated if needed. They are at Port Neches and Louisville.

Butyl Plants—In addition to those synthetic plants there are two butyl plants which make a type of rubber for tire tubes that is even superior to natural rubber for that purpose, because it holds air better. As a result, butyl has virtually preempted the tube market. At Baton Rouge, Esso Standard Oil operates a \$27,000,000 butyl plant, while at Baytown, Texas, Humble Oil operates another just as large. In all, these plants can make 68,000 tons of butyl annually.

Butadiene Plants—Equally impressive and important is the string of four butadiene plants now operating in the South. Butadiene is one of the basic raw materials used in making GR-S synthetic rubber. The other basic material is styrene, which is derived from benzene and ethylene.

Butadiene may be made either from petroleum or grain alcohol. But costs greatly favor petroleum, and as a result, the few grain alcohol plants are currently in a standby condition. Petroleum is the sole source today.

The four butadiene plants now operating are at Lake Charles, La. (Cities Service Refining Company, operator); Baytown, Texas (Humble Oil, operator); Port Neches, Texas, Neches Butane Products Co., which is jointly owned by several oil companies, and Borger Texas (operated by Phillips Petroleum Co.).

Total capacity of those four plants is 241,000 tons, and the investment in the plants totals over \$125,000,000.

In addition, three standby butadiene plants are in the South. One is at Louisville; another is at Baton Rouge, and a third is at Houston.

It may be noted that all of the butadiene plants are within a short distance of the GR-S plants, and in some cases are

in the same city as the plants which they serve.

Private Industry Buying Up Most Facilities—Within the next few years, it is likely that many, if not all of those synthetic facilities will be purchased by private industry from the Government. In some cases, Southern capital will complete the purchase. In other cases, rubber or oil companies will buy them. Already, President Truman has suggested legislation looking towards the sale of the properties to private owners.

Some rubber plants in the South have been determined surplus and have already been sold. They include plants located at: Louisville, Ky.; Baton Rouge, La.; Texas City, Texas; Velasco, Texas; Memphis, Tenn.; Louisville, Ky.; Institute, W. Va.; El Dorado, Ark.; Ingleside, Texas; Corpus Christi, Texas; Louisville, Ky.; Baltimore Md. Respective purchasers of the above plants were: B. F. Goodrich Co.; Esso Standard Oil Co.; Monsanto Chemical Co.; Dow Chemical Co.; Q. O. Chemical Co.; E. I. du Pont de Nemours & Co.; Carbide & Carbon Chemical Corp.; Lion Oil Co.; Sampson Machine & Supply Co.; Taylor Refining Co.; National Carbide Corp.

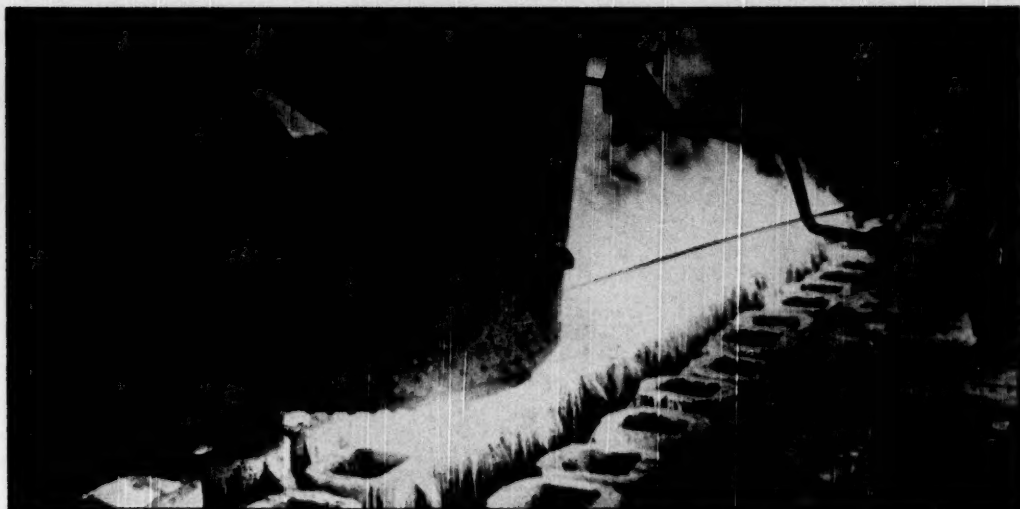
Potential—A very large output of synthetic GR-S rubber will be required from now on. The South is indeed fortunate that the location of the oil wealth of the country, coupled with other important factors, has dictated construction of such a heavy proportion of synthetic rubber capacity in the South. Those plants have already served as a nucleus for industrial growth in the South and Southwest, and they will continue to contribute to the expansion of the rubber and tire manufacturing industry.

Railroad Operating Revenues Up 1 Per Cent Over Mar. '49

Based on advance reports from eighty-two Class I railroads, whose revenues represent 81.1 per cent of total operating revenues, the Association of American Railroads, Washington, D. C., recently estimated that railroad operating revenues in March, 1950, increased one per cent above the same month in 1949. The estimate for March, 1950, covers operating revenues only, and does not take operating expenses or other costs into account.

Sixteen Class I railroads, whose revenues represent 66.6 per cent of total operating revenues in the Southern Region, estimated that their operating revenues in March, 1950, increased over those in March, 1949, by 2.5 per cent. Estimated freight revenue increased 5.1 per cent, but estimated passenger revenue decreased 16.8 per cent.

Thirty-three Class I railroads, whose revenues represent 91 per cent of total operating revenues in the Eastern District, estimated that their operating revenues in March, 1950, increased over March, 1949, by 4.4 per cent. Estimated freight revenue increased 7.4 per cent, and estimated passenger revenue decreased 10.1 per cent.



MOLTEN STEEL being poured by a worker in the plant of the Atlantic Steel Company at Atlanta, Georgia.

Steel Firm Geared To Southern Progress

THE Atlantic Steel Company, Atlanta, is gearing itself to the industrial expansion of the South with a continuing expansion program of its own. It not only involves a sweeping modernization, expansion and improvement program of its physical facilities, but an increased sales, advertising and promotional program as well.

Expansion Program—Robert S. Lynch, dynamic president of the steel firm, reports that the Atlantic Steel Company's three-year program of expansion and modernization has been principally to widen the scope of products, facilities and services offered by the company. It has greatly expanded its commercial heat-treating division, and completely new hot-dip galvanizing equipment has been installed in the wire mill. Its manufacturing division, which produces forgings and stampings for a wide variety of products and parts, has also been enlarged.

"One of the fundamental reasons for our expansion and modernization program," explained Mr. Lynch, "has been to diversify our operations. We realize, as most business people in this area do, that there is a crying need for more manufacturing of finished and semi-finished products in this section."

Production Record—In spite of the 29-day strike during November and December, the company established new production records in galvanized wire, barbed wire, fence and nails during 1949. Mr. Lynch said that a comparison of last year's total production with the record year of 1948 would not present a fair picture. He added that the hoop mill produced more cotton ties in 1949 than in any year since 1925.

"Strike or no strike," said Mr. Lynch,

"from a production standpoint 1949 was a very successful year. About the best comparison I know to make is to take the average of the 10 best years from 1920 to 1940 and compare it with 1949. On that basis, Atlantic Steel Company produced nearly twice as many net tons of steel from its open hearth furnaces; the blooming mill showed a 93% increase; the rod mill has a 107% increase, and the hoop mills produced 56% more. All in all, the total production of our rolling mills and wire department was almost double the average of the best 10 years during the 1920-1940 period."

Employee Relations—Atlantic Steel Company is noted for its progressive employee-relations program. The company attributes much of its progress to the fact that it has long enjoyed an enviable record in this important phase of business.

One thing that management has not failed to stress is the importance of profits to the welfare of every employee.

"It is surprising how little thought people give to where the money comes from for plant expansion, modernization and improvement, such as we have been carrying on since the war," declared Mr. Lynch.

Outlook—Stating that the company has enjoyed excellent business during the past several years, and that the outlook at the moment is very bright, Mr. Lynch referred to a recent article in *Dun's Review* which pointed out that in the Iron and Steel Division of a survey conducted by that publication, there were 127 failures during the first 10 months of 1949 and they represented liabilities of \$10,000,000.

"The astonishing thing to me was that

inadequate sales accounted for 40% of the failures," said Mr. Lynch. "Heavy operating expenses accounted for 17% of them, inventory difficulties 14% and excessive fixed assets 15%," he continued.

"So, you can see why we are constantly on the alert to improve not only our production facilities, but our selling facilities as well," Mr. Lynch said.

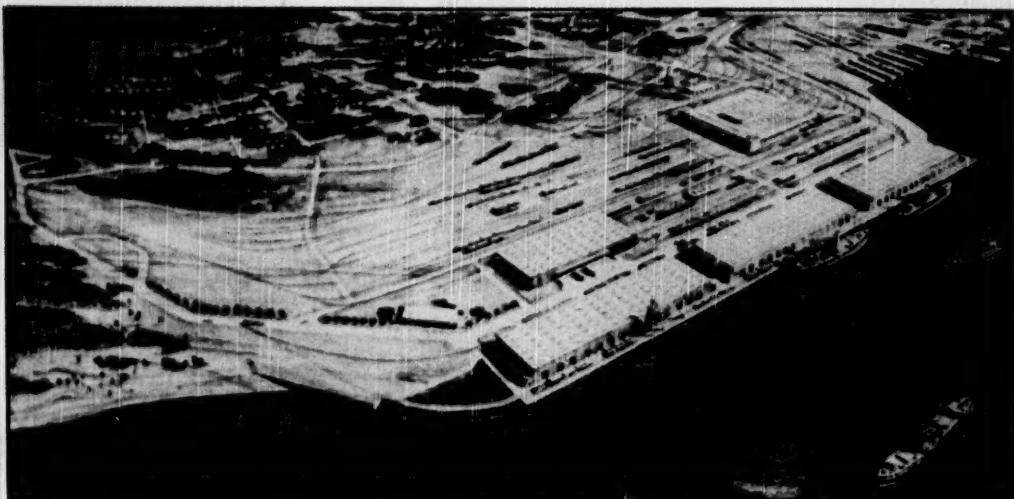
The company has enlarged its sales staff considerably and is launching the largest sales and advertising program since the war.

"We are carrying out a program that will enable us to compete profitably with some of the big steel mills," commented Mr. Lynch. "We are offering a wider variety of finished and semi-finished products than ever before, and we expect to increase this phase of our business. Our Warehouse Division, established just two years ago, is constantly adding more products and will continue to add new products to fill the growing needs in our marketing area," he added.

Growing with the South—In reviewing the tremendous industrial expansion that has taken place in the South since the war, Mr. Lynch stated, "Somebody is going to grow with the industrial expansion of the South, and I see no reason why it won't be the Atlantic Steel Company."

Operating three open-hearth furnaces, the Atlantic Steel Company also operates a blooming mill, rod mill, 10- and eight-inch hoop mills, wire mill, various wire products departments, as well as heat-treating, galvanizing, forging and stamping facilities and various supplementary operations. Many of its products are marketed under the trade-name "Dixisteel."

CONSTRUCTION



PROPOSED PORT FACILITIES of North Carolina States Ports Authority, Robert & Co., Associates, Inc., Architects.

Southern Construction Rises 61% In April

By S. A. Lauver
News Editor

SOUTHERN construction took an upward course in April with the value of awards in the sixteen-state area totaling \$304,573,000, or a sixty-one per cent increase over the figure for the preceding month and sixty-four per cent stronger when compared with the total for the fourth month of last year.

Contracts awarded in the first four months of this year are valued at \$1,023,906,000, representing more than a seventy-five per cent increase above the level of southern lettings recorded during the first four months of 1949. Not

since 1942 has a larger total been registered in the first four months. The figure for the first third of that year was \$1,427,710,000.

The accumulation for the elapsed months of this year embraces \$339,744,000 for private building, which is up forty-seven per cent; \$187,188,000 for roads, streets and bridges, an increase of thirty-nine per cent; \$160,042,000 for heavy engineering construction, which shows a rise of forty per cent, and \$181,277,000 for public building and \$155,655,000 for industrial construction. These latter are

down twelve and ten per cent, respectively.

Private building, with its \$339,744,000, was the largest contributor to the high four-month total, and consisted of \$257,244,000 for residential projects, including apartments, hotels and dwellings; \$33,853,000 for commercial buildings such as stores, restaurants, filling stations and garages; \$31,421,000 for assembly buildings, including churches and theatres, and \$17,226,000 for office type buildings.

Second largest element in the four-month total was the \$187,188,000 for roads, streets and bridges, which last year in the same period placed fourth on the list. Virginia so far has a record of \$49,959,000 in highway awards, with five other states above the ten million dollar mark. These are Texas, \$23,164,000; North Carolina, \$18,092,000; Maryland, \$16,113,000; Florida, \$13,342,000, and Oklahoma, \$10,776,000.

Ranking third from the viewpoint of value is the \$181,277,000 for public building. This type of work in the first four months of 1949 was the second largest in value of contracts in the South. The current figure embraces \$112,657,000 for school construction, which is up twelve per cent, and \$68,620,000 for government buildings and hospitals, this dropping forty-one per cent.

Stronger than it was at this time last year, heavy engineering construction with its \$160,042,000 for the four months is composed of \$88,098,000 for dams, drainage, earthwork and airports, \$36,716,000 for sewer and water work and \$35,228,000 for government electric projects. Value of contracts for dams is up ninety-

SOUTH'S CONSTRUCTION BY STATES

	April, 1950	Contracts to Be Awarded	Contracts Awarded First Four Months 1950	Contracts Awarded First Four Months 1949
	Contracts Awarded			
Alabama	\$14,134,000	\$37,297,000	\$30,118,000	\$77,767,000
Arkansas	6,569,000	17,297,000	18,539,000	8,699,000
Dist. of Col.	778,000	29,991,000	12,248,000	31,544,000
Florida	34,931,000	36,654,000	112,150,000	82,467,000
Georgia	17,225,000	24,783,000	44,224,000	38,215,000
Kentucky	5,768,000	11,671,000	13,521,000	14,249,000
Louisiana	17,466,000	15,517,000	90,231,000	56,862,000
Maryland	24,832,000	48,867,000	108,256,000	62,658,000
Mississippi	11,016,000	49,836,000	35,634,000	20,912,000
Missouri	21,154,000	27,583,000	32,588,000	27,536,000
N. Carolina	38,993,000	44,677,000	76,495,000	57,252,000
Oklahoma	4,491,000	4,639,000	28,541,000	34,969,000
S. Carolina	6,549,000	13,635,000	37,552,000	27,011,000
Tennessee	13,366,000	23,783,000	31,741,000	120,338,000
Texas	55,845,000	91,968,000	219,904,000	241,733,000
Virginia	10,172,000	89,048,000	85,844,000	31,844,000
W. Virginia	1,264,000	7,471,000	6,520,000	4,415,000
TOTAL	\$304,573,000	\$583,344,000	\$1,023,906,000	\$872,603,000

CONSTRUCTION

four per cent, while government electric work shows a larger total by about forty-two per cent. Sewer and water construction is down approximately seventeen per cent in the four months.

Industrial construction stands at the bottom of the list. The total for the first four months of 1950 is \$155,655,000, or ten per cent under the \$174,622,000 for the similar period of last year. Southern industrial expansion, in general, is following the predictions made earlier by the Department of Commerce and the Securities and Exchange Commission. Those agencies say that capital outlays this year will be about eleven per cent under expenditures of last year.

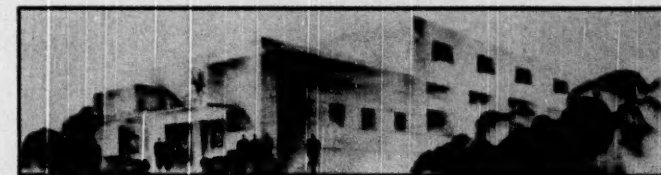
April's total for southern construction—\$304,573,000—is the peak for the year up to this time. Values for preceding months, as tabulated from reports in the *Daily Construction Bulletin*, were: \$188,902,000 for March; \$277,155,000 for February and \$253,276,000 for January. The average for the four-month period is \$255,976,000, or a figure about seventeen per cent greater than the monthly average for the comparable months of last year.

The April total embraces \$78,307,000 for private building, a twenty per cent increase over the total for March; \$57,084,000 for public building, a rise of forty per cent; \$56,761,000 for heavy engineering construction, higher by seventy-one per cent; \$42,425,000 for highways, bridges and streets, which is up eighteen per cent, and industrial construction, where several individual programs pushed up the total to \$69,996,000, or three hundred seventy-eight per cent.

As in preceding months, residential construction was the predominant factor in the private building field. The \$56,752,000 for such work was seventeen per cent above its March counterpart. Commercial buildings, with their \$11,759,000 total, and office type buildings, total \$3,209,000, were also up, but assembly buildings, including churches and theatres, represented a decrease.

Industrial construction, which has hovered at ebb level during the preceding months of 1950, was given a substantial boost by one company which announced a \$36,000,000 pipeline construction program, and by another organization that proposes to expand a North Carolina operation by a \$20,000,000 construction plan. Industrial construction totals for the other months of this year are \$36,745,000 for January, \$34,301,000 for February and \$14,613,000 for March.

Public building with its \$57,084,000



AUDITORIUM, Miami Beach, Florida, Milton Abrams, Architect.

total included \$20,984,000 for government buildings and \$36,100,000 for school buildings, the former being up twenty-one per cent; the latter, sixty-seven per cent.

The engineering construction total of \$56,761,000 was comprised of \$20,895,000 for dams, drainage, earthwork and airports, \$12,348,000 for sewer and water work and \$23,518,000 for government electric projects. All were up when compared with the values for the preceding month, with the government electric projects increasing approximately fourfold.

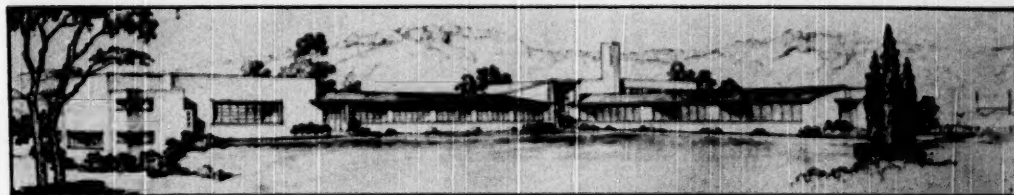
Highway and bridge totals in April were stronger, with a substantial percentage increase over the \$35,811,000 for the preceding month. Figures for the

other months of the year are \$61,067,000 for February and \$47,885,000 for January. The April total included such totals as the \$7,364,000 for Florida, \$7,890,000 for Texas, \$5,198,000 for Kentucky, \$4,929,000 for North Carolina and \$4,405,000 for Maryland.

Construction through the country in March rose seasonably from unusually high levels maintained in the winter months, according to the Departments of Labor and Commerce. Expenditures for new construction put in place during the month amounted to \$1,500,000,000, or about eight per cent above the revised February estimate and eighteen per cent more than in March of 1949.

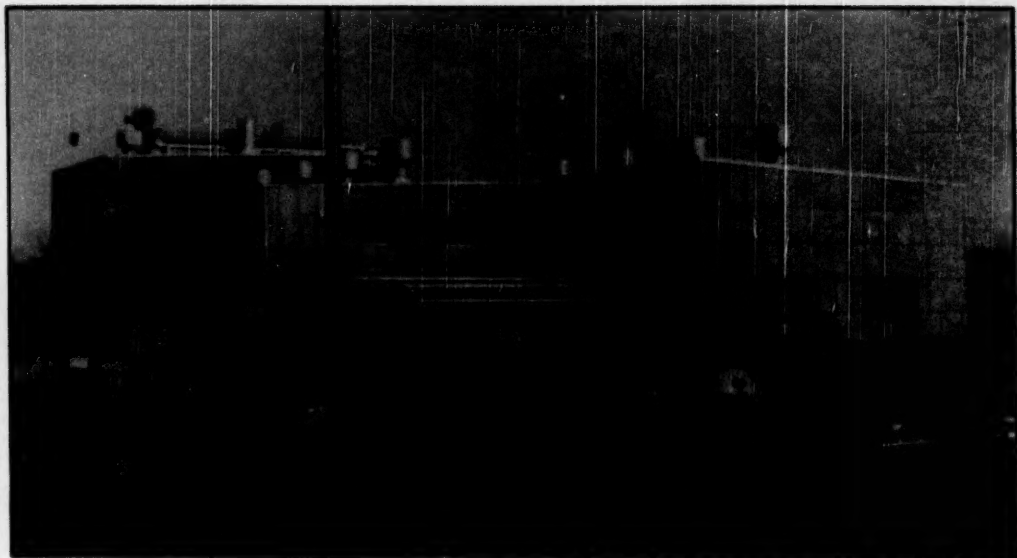
SOUTH'S CONSTRUCTION BY TYPES

	April, 1950 Contracts Awarded	Contracts to be Awarded	Contracts Awarded First Four Months 1950	Contracts Awarded First Four Months 1949
PRIVATE BUILDING				
Assembly (Churches, Theatres, Auditoriums, Fraternal)	\$6,587,000	\$12,755,000	\$31,421,000	\$31,439,000
Commercial (Stores, Restau- rants, Filling Stations, Gar- ages)	11,759,000	24,815,000	33,853,000	37,487,000
Residential (Apartments, Ho- tels, Dwellings)	36,752,000	82,077,000	257,344,000	156,848,000
Office	5,209,000	18,875,000	17,716,000	19,714,000
	\$78,307,000	\$138,007,000	\$339,744,000	\$219,658,000
INDUSTRIAL	\$69,996,000	\$32,008,000	\$155,655,000	\$174,622,000
PUBLIC BUILDING				
City, County, State, Federal and Hospitals	\$20,984,000	\$79,566,000	\$68,620,000	\$117,302,000
Schools	36,100,000	64,950,000	117,657,000	100,945,000
	\$57,084,000	\$144,525,000	\$186,277,000	\$218,247,000
ENGINEERING				
Dams, Drainage, Earthwork, Airports	\$20,895,000	\$57,724,000	\$68,608,000	\$45,216,000
Federal, County, Municipal Electric	23,518,000	11,236,000	35,778,000	24,560,000
Sewers and Waterworks	12,348,000	26,218,000	36,716,000	44,404,000
	\$56,761,000	\$95,178,000	\$140,642,000	\$114,176,000
ROADS, STREETS & BRIDGES	\$42,425,000	\$153,631,000	\$187,188,000	\$154,311,000
TOTAL	\$304,573,000	\$583,344,000	\$1,073,996,000	\$977,665,000



PROPOSED HIGH SCHOOL at Menard, Texas, Wilson and Patterson, Architects, Fort Worth, Texas.

INDUSTRIAL EXPANSION



New Felt Mill At Shreveport, La.

A boast of last spring was made good at 11:50 P. M., November 30th, and several men who said it couldn't be done paid off their bets. On that day and hour the first felt was produced at Bird & Son's new Felt Mill, making good the prediction of vice-president Ralph A. Wilkins who last spring had said that he'd have the mill operating on December 1st—two months ahead of the originally scheduled date of February 1, 1950.

Back of that first roll of felt were months of careful planning and just plain hard work. Ground was broken and construction started on February 1st of last year. From the very start the work progressed rapidly and smoothly. Everything necessary for the felt making operations was in and ready for final adjusting and testing on November 19th, a few days before Thanksgiving. Less than two weeks later the wheels were turning, producing a salable product.

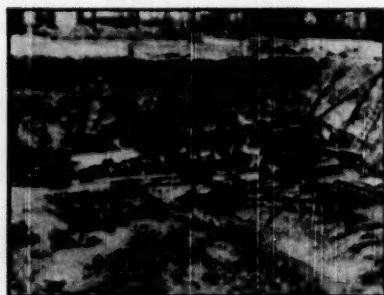
This mill has really been built "from the ground up."

Even the six water wells on Bird property, furnishing five hundred thousand gallons per day, were part of the project. Likewise, a special railroad siding was built for the unloading of rags, wood and papers. The wood is stored alongside the tracks and the papers and rags on a large cement slab near the beater room.

The new Felt Mill, as already indicated, comes under the direction of vice-president Ralph A. Wilkins who is in charge of all paper and felt operations at Bird & Son. Locally the plant will be operated by L. L. Williams, Southwestern Manager; B. P. Soward, Superintendent, and Neill McNeill, Assistant. The same foremen and other supervisory personnel will be used to operate both the new Felt Mill and the Roofing Mill.

The Shreveport Felt Mill, only an engineer's plan and a draftsman's blueprint in January, 1949, is now the newest operating unit of Bird & Son, Inc., and they are justly proud of it.

MARCH 1949—THE HOLE



NOVEMBER 30, 1949—THE FIRST FELT



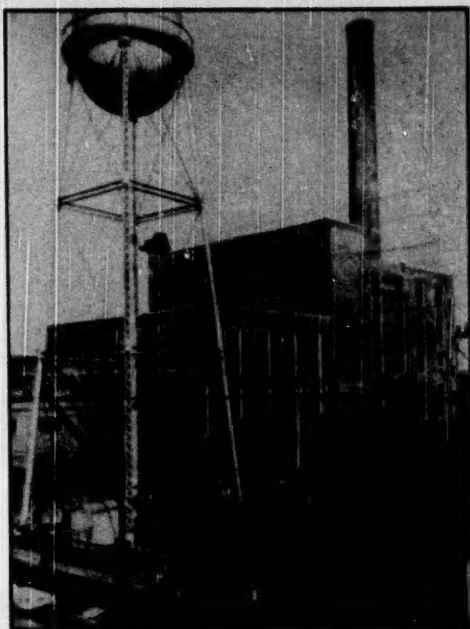
INDUSTRIAL EXPANSION

New Power Plants

The new plant of *Missouri Power and Light Company*, at Mexico, Missouri, pictured at right, when completed will house a total rated generating capacity of 19,000 kilowatts made up of two units. The first unit installed was a 7,500 kw Allis-Chalmers turbo-generator which went into operation the latter part of November, 1949. The remainder of the capacity will be an 11,500 kw Westinghouse turbo-generator which is scheduled for completion the latter part of this coming summer.

Formal dedication of *Southwestern Gas and Electric Company's* new Knox Lee Power plant below on April 29 marked another long step in the industrial growth of East Texas. The ultra-modern new plant is located on the shores of Lake Cherokee in Gregg county. The well over a million dollars it took to build Lake Cherokee was all put up by East Texans.

The first 30,000 kw generating unit was put on the line early this year at Knox Lee plant. A second identical 30,000 kw unit is being manufactured and will be installed early in 1951. The grounds at the plant are so arranged that additional units may be added as demand requires. For instance, the installed water intake crib can handle water requirements for 180,000 kw capacity.





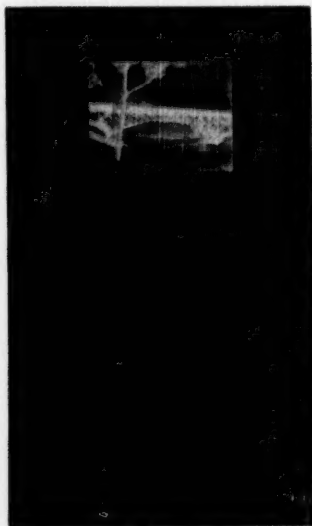
ROANOKE PLANT of the Virginia Bridge Company, Roanoke, Va. This is the oldest of three plants now operated by the company. The other two are located at Memphis, Tennessee, and Birmingham, Alabama.

Structural Steel Service At Its Best

WHEN Virginia Bridge Company opened its new plant in Birmingham late in 1948, it was described as "... a steel fabricator's dream ... a plant embodying every feature of layout, design and equipment ... a modern version of a

model steel fabricating plant in which nothing has been omitted that will better enable us to serve the customer's interest ... this magnificent tool of production in Birmingham, together with our two plants at Roanoke, Va. and Memphis, Tenn., makes Virginia Bridge an unexcelled source of structural steel requirements of the South and Southwest."

In less than sixty years the firm now known as Virginia Bridge has grown from two buildings in Roanoke to become the third largest fabricator and erector of structural steel in the United States, and possessor of the plant described above, recognized as the most modern in the nation with respect to layout and equipment.



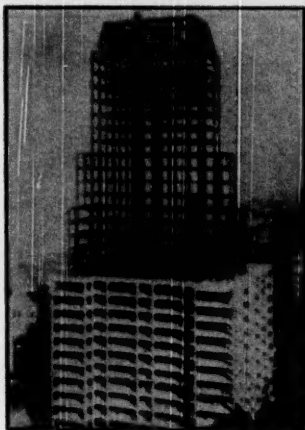
OLD specification sheet for a steel highway bridge in Adams County, Miss. Date—about 1900.



ORIGINAL plant of the American Bridge and Iron Co., 1890. Capital, \$200,000. This firm, located in Roanoke, Va., was the forerunner of Virginia Bridge.



Cochrane Bridge over Mobile Bay.



Sterrick Building—Memphis, Tenn.



Central Expressway—Dallas, Tex.

ON ALL OF THESE JOBS Virginia Bridge Co. supplied the structural steel, and, in most cases, erected the structures.

Beginnings—The company was first established as the "American Bridge and Iron Co." by Charles C. Wentworth and Joseph T. Hunter, in 1889. As such it produced light highway bridges and small buildings. The depression of the early nineties forced the eventual sale of the property, and in 1895 Virginia Bridge and Iron Co. was organized under the presidency of Samuel Walton, with an invested capital of \$50,000. The firm prospered under his leadership and under its next president, L. W. Robertson, until his retirement in 1904. He was succeeded by C. Edwin Michael, who had served since the reorganization of the company as secretary-treasurer.

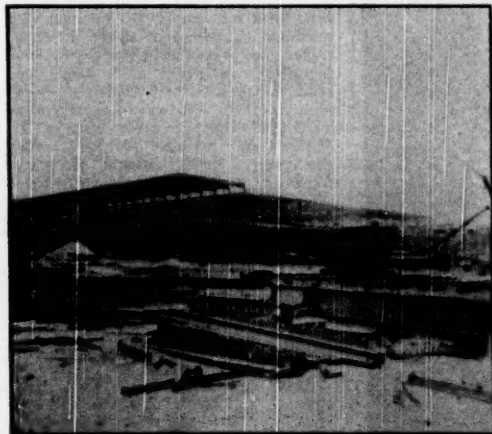
Period of Growth—During the thirty-two years of Mr. Michael's presidency Virginia Bridge grew rapidly. As investment of new capital made it possible, the company expanded both in facilities and in scope of operations.

It was during this period that the Memphis plant was built and the Birmingham property was acquired. The facilities at Memphis were built in 1908 when it became obvious that the demand for the company's products west of the Mississippi was going to continue to grow, and those at Birmingham were added to improve and facilitate service in the Southern territory. The expansion of operations during these years is largely attributable to the strong leadership of C. E. Michael, himself an outstanding steel salesman, and to the work of Beverly L. Sneed, who served as vice president in charge of sales during this period.

Mr. Michael retired in 1936 when the company became a part of the United States Steel Corporation. By that time Virginia Bridge was bidding on contracts for every type and size of construction involving the use of steel.

Plants and Buildings—If you want an inspiring picture-story of industrial progress in the South and Southwest since the turn of the century, a complete set of pictures of Virginia Bridge projects in this field will give it to you. Such a presentation would include plants for the manufacture of finished products or the processing of raw materials. The list of products involved includes: rayon, nylon, cellophane, textiles, chemicals, plastics, leather goods, paper, rubber, steel, zinc, copper, coal, oil, aluminum, etc.

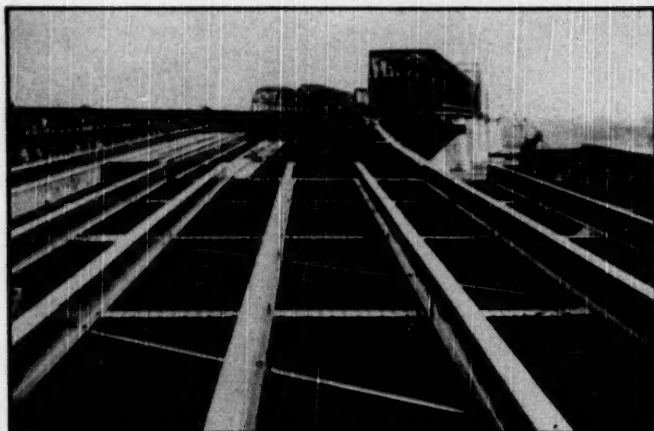
Bridges—There is a saying at Virginia Bridge that you cannot travel ten miles in any direction in the South without crossing a bridge or seeing a structure of some type built by Virginia steel, and there is more truth in this than you might suspect. Consider the fact that this firm has built enough bridges to extend two to a mile across the United



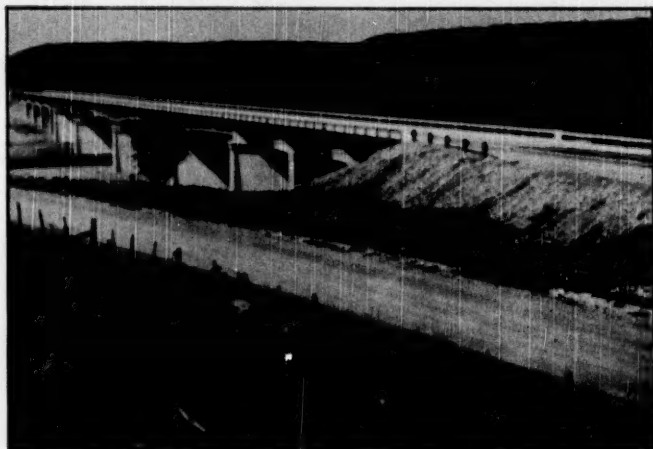
VIRGINIA BRIDGE supplied the steel for the General Motors assembly plant at Doraville, Georgia.



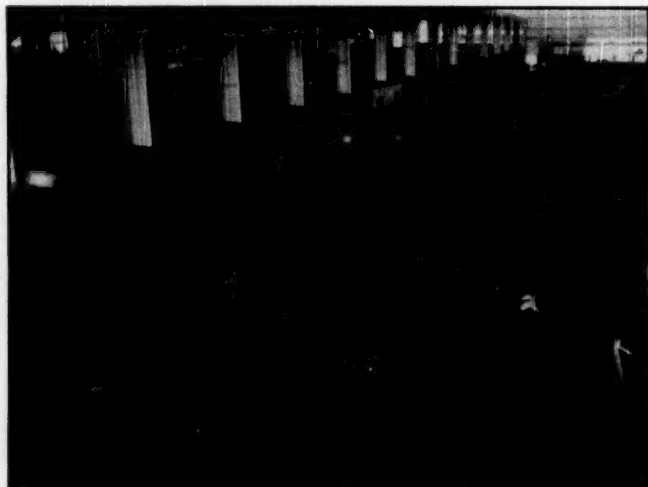
FABRICATING the steel for the upper-deck extension of New Orleans' Sugar Bowl was another job.



MISSISSIPPI RIVER BRIDGE, looking east toward Memphis. Opened 1959.



NORTH LLANO RIVER 10-mile crossing, U. S. Highway 290, Junction, Tex.



300-FT. TRUSS span for Fishing Creek Bridge, Pulaski County, Kentucky.

States from the Atlantic to the Pacific. Consider also the fact that it has fabricated the steel for over 200 bridges in the state of Texas alone. As to quality, an engineer on a job out in Los Angeles reported that out of the thirty-four odd thousand field joints, only two had to be reamed.

Bridge work done by the company runs the gamut from small foot bridges to giant 10,000 ton jobs. Major bridge contracts now in process include: York River Bridge, 5900 tons, Yorktown, Va.; Calcasieu River Bridge, 8783 tons, Calcasieu Parish, La.; Fishing Creek Bridge, 2000 tons, Somerset, Ky.; MK&T R. R. Relocation Bridges, 3250 tons, Whitney Dam, Whitney, Tex.; N&W Railway, 1998 tons Cooper, W. Va.; and more than one hundred other bridges large and small throughout the South and Southwest and for export to the Philippines.

Stadiums, etc.—Virginia Bridge is the world's largest builder of steel stadiums and boasts such famous structures as: The Orange Bowl at Miami, Fla.; The Sugar Bowl at New Orleans, La.; steel deck extension, Crosley Field grandstand, Cincinnati, Ohio; Ladd Memorial Stadium at Mobile, Ala.; Gator Bowl at Jacksonville, Fla. and many others.

The Personal Touch—What is behind this outstanding record of operation and accomplishment? In the final analysis it would appear to be the human element, the personal touch, from one end of the operation to the other, and from the word go. From the beginning of its history down to the present time the leadership of the company has been of the highest calibre. The splendid quality of the men and women that form the ranks has been outstanding and constant. Nearly one-fourth of all the employees now in service of the company have been in its employ continuously for twenty years or more. Many can boast of thirty years' service, and a few can look back over forty and forty-five years. The vice president and general manager, Herbert A. Davies, started with the company forty years ago. The other officers of the company, all with many years' service behind them, are: Marion E. Chapman, vice president in charge of sales; Hiram S. Dance, vice president in charge of manufacturing operations; A. B. Davis, operating manager; C. W. Ogden, chief engineer; C. W. Wentworth, chief draftsman; C. E. Via, purchasing agent; C. R. Jones, traffic manager; A. R. Gremse, comptroller; Roy L. Mastin, secretary-treasurer; E. C. Jacob, manager of erection; F. W. Nover, mechanical engineer; and T. W. Wimmer, advertising manager.

Knowledge of all these things explains the unquestioned acceptance that the company's work enjoys throughout the nation, and also helps to explain the growth of the firm from the two small buildings in Roanoke, some fifty odd years ago, to its present size, a size that requires maintenance of sales offices in Atlanta, Georgia, Dallas, Texas, New York, N. Y., Denver, Colorado, and San Francisco, California, to handle the local and foreign demand for the products made in the plants at Roanoke, Birmingham and Memphis.

Baltimore Chevrolet Plant Produces Millionth Car

Baltimore's Chevrolet plant last month produced its millionth passenger car.

The sporty, mist green model rolled from the end of a long assembly line on Broening highway at 3:15 p.m. April 19, as high General Motors executives, state and local officials and guests waited to witness the ceremony of presenting the vehicle to the Maryland Cancer Society.

One hour previously, the shining, new vehicle had started as a few chassis channels on a system so coordinated that fenders, engine, body, wheels, and other parts, even to gasoline for the final test, converged on the main conveyor as hundreds of workers swarmed above and below to contribute their part toward production of a modern automobile.

Actually, the millionth passenger car was one of many that moved through the plant the day the mark was reached. Others of all hues and shades and models had preceded it and had come afterwards at the rate of sixty-one cars an hour, produced side-by-side with the brightly colored commercial vehicles assembled on a parallel but separate line with its hourly capacity of 30 units.

Tasks of hundreds of operators employed in the actual assembly process are lightened by the five miles of overhead and floor conveyors installed to quicken fitting the 4,300 parts into the Chevrolet cars and trucks. Engines are brought from other plants, but the bodies are made in the adjoining plant of the Fisher Body division.

Floor area of the Baltimore Chevrolet plant is 927,000 square feet. The site at 2122 Broening Highway contains 48 acres. Total employment, both in the Chevrolet and Fisher Body operations, exceeds 5,000, with payrolls last year when almost 200,000 cars and trucks were made, amounting to over \$15,000,000 in Baltimore. Output to April 1 was 1,323,111 units.

T. H. Keating, vice president of the General Motors and general manager of the Chevrolet division, featured speaker at the luncheon preceding the millionth car ceremony, forecast ten years of sound prosperity, if the country doesn't talk itself into a depression, emphasizing Baltimore's current business condition, by revealing that the local Chevrolet plant was one of three General Motors operations on a two-shift basis.

The automobile, he said, is the most essential purchase of the average purchaser, who cannot live and enjoy the country's advantages without automotive transportation. Pointing to the western cities where all people depend on such means of movement, he declared that development of metropolitan areas is dependent upon automobiles.

Participating in presentation of the millionth car to the cancer drive were Gov. William Preston Lane, of Maryland; Mayor Thomas D'Alessandro, of Baltimore; Mr. Keating and W. B. M. Brownlie, Baltimore plant manager, with other prominent business and public officials looking on.

U. S. Steel Head Sees American System Periled

If misguided planners and politically ambitious office-holders have their way, opportunity, initiative and enterprise will disappear, according to Benjamin F. Fairless, president of the United States Steel Corp., who in an address before almost a thousand Baltimore business men, said he wonders why the self-appointed saviours of the national welfare in Washington always seem to overlook the fact that the American system of free competitive enterprise is the only one left in the world not controlled by "power-hungry politicians."

The American economic system "is in deadlier peril today than it has ever been" during his lifetime, the steel executive observed, "but I honestly do not know how it can be protected against its self-styled 'friends' in Washington who would literally hack it to death on the pretext of saving its immortal soul." These "friends," would replace the guideposts of the free American economy with others reading "Detour to Utopia," a juggling operation he termed "economic murder."

Most dangerous of the deceptions, Mr. Fairless declared, "is the fallacy that our whole economy can be divided into two parts labelled 'big' and 'little' business. This deception has been used so long and has become so familiar to us that we have begun to accept it, unthinkingly and without question. Because some statistician has arbitrarily drawn an entirely imaginary line between companies employing more or less than 500 persons, we argue about 'big' business and 'little' business as though they were two hostile armies warring against each other."



B. F. Fairless

Complete interdependence of so-called "big" and "little" business was emphasized during the recent war, despite the efforts of the theorists to "drive the wedge of class distinction into the machinery." Setting up of the agency to funnel war contracts into the hands of "small business," resulted in many instances of expending as much as fifteen per cent more than was paid to "big business" for the same

work, and Mr. Fairless said, some of the government planners so far forgot themselves as to look with favor upon the idea of a merger.

Although seventy-five per cent of the prime contracts had gone, of necessity, to the one hundred largest manufacturing companies, the U. S. Steel head stated, "it was small business that ended up by scoring the greatest increase in sales, in

profits and in assets," stressing that big business had merely succeeded in doing what the government had set out to do and failed by "loading up small business with contracts, just as it always does, in peace or in war."

Mr. Fairless expressed the wonder if it isn't time for an entirely new congressional investigation—one that would hale before it "all the other government agencies and congressional investigating committees which seem to be trying so desperately to destroy the finest and the only successful economic system that exists in the world today," concluding with the further observation that "I wonder if it isn't time to get back on our high-speed highway to progress and growth and production, before we get mired and lost forever on a detour to Utopia."

Baltimore Commerce Body Gets Plant For Thurmont

Maryland's first plant resulting from the accelerated industrial development program of the Baltimore Association of Commerce moved into the reality stage last month, when Moore Business Forms, Inc., of Niagara Falls, New York, let the contract for a \$250,000 plant to be constructed at Thurmont, in the middle part of the state.

S. Page Nelson, Baltimore Commerce Association president, and Clate Malleon, Baltimore district manager for the Moore concern, jointly announced the decision to proceed with construction of the new plant, which will be located on a

seven-acre site in the Frederick County community. Work is being started immediately.

Location of the plant on Baltimore's perimeter emphasizes a trend which has developed since the war, according to Mr. Nelson, who pointed out that some firms now regard smaller communities moderately distant from populous cities as the ideal site for branch establishments.

The new plant is the direct result of missionary work pushed by Association of Commerce forces guided by William P. Rock, recently appointed director of new industry location. He first contacted the Moore firm last October during a routine trip aimed at selling the advantages of the Baltimore area.

SOUTHERNERS AT WORK

McClellan Elected President Of Textile Institute

Stephen McClellan was unanimously elected president of the Institute of Textile Technology, Charlottesville, Va. at a trustees meeting recently. Mr. McClellan is president of Specialties, Inc., a Syosset, L. I., research organization.

During the last several months, a committee of research men of the member mills, headed by Walter Regnery, president of Joanna Mills, has been reviewing the research problem to tie it closely with the problems of the membership.

In selecting Mr. McClellan, the trustees gave evidence of their enthusiastic support of the program as determined by the research committee, said Mr. Regnery. The committee has been instituted permanently to work with the new president to review constantly the program, which can never be static because of the nature of research, he explained.

Mr. McClellan succeeds Ward Delaney who resigned last fall and who is now associated with the Oscar Johnston Foundation.

SASI Holds Annual Meeting In Charleston May 1 and 2

"Invent something, manufacture it, and sell it"—that's the secret to economic success, according to the South's top brains, who recently announced plans for a Southwide conference to review the region's progress during the past fifty years and determine ways to accelerate Southern progress in the half-century ahead. The announcement, from the Atlanta headquarters of the Southern Association of Science and Industry, the region's largest and most representative development body, gave plans for the SASI's Tenth Annual Meeting, being held in Charleston on May 1 and 2.

According to the preliminary program released, the three chief factors in regional advancement which need to be studied are development of technical "know-how," manufacturing capacity, and marketing ability. Constantly improve these points, SASI leaders say, and the South will enjoy greater prosperity than it has ever known.

The two-day regional meeting, which is expected to attract several hundred leaders from fourteen Southern states, will open with three comprehensive reports, covering significant twentieth century developments in agriculture, science, and industry. Speakers at this session will include Judge Richard W. Wirt, Southern Railway executive, from Washington, and Dr. Stewart J. Lloyd, Dean of the School of Chemistry at the University of Alabama, and current SASI President. The progress reports will be summarized in a luncheon address by

South Carolina Governor J. Strom Thurmond, who heads the Southern Governors' Conference.

Wagner Electric Corp. Elects New Officers

A number of executive promotions were made by the Board of Directors of Wagner Electric Corporation of St. Louis, Missouri, in their first meeting held recently following their election at the annual stockholders meeting. Mr. P. B. Postlethwaite, who has been president of the company and chairman of the executive committee for the past twenty-four years, retired as president at his own request, and was elected to the newly created office of chairman of the board. He will continue as chairman of the executive committee. Mr. J. H. Devor, who has been vice president since 1941, was elected president. Mr. H. N. Felton, manager of the St. Louis sales branch, was elected vice president in charge of sales. Mr. L. W. McBride, credit manager, was elected assistant secretary-treasurer, to succeed Mr. A. K. Bahret who has reached retirement age after fifty years with the company.

Mr. Postlethwaite started with the Wagner company in 1909 as a student apprentice after graduating from college with a Bachelor of Science Degree in Electrical Engineering. Upon completion of his student engineering training, he was transferred to the Cincinnati sales office and became manager of that office in 1912. He returned to St. Louis in 1916 to organize and manage the service department. During the first World War he acted as assistant to the president in handling war contracts for the company. Following the war, he was advanced to the positions of assistant sales manager of the Automotive Division and manager of the Service Division. In the early 1920's, following organization changes, he was named vice president and elected to the board of directors. He was elected to the presidency in July of 1926.

Floyd To Succeed Skinner As Manager, S. C. State Chamber

Selection of Mr. John C. Floyd to succeed Mr. D. A. Skinner as general manager of the South Carolina State Chamber of Commerce, has been announced by President C. H. Campbell. He assumed his duties April 3.

Mr. Floyd, a native of Newberry, has had long experience in the field of merchandising. Having received his higher education at Newberry College, University of Virginia (A.B. 1920) and in the Harvard School of Business Administration, he entered the banking business in Newberry. He soon, however, left this for the textile sales field as a representative

of Lawrence and Company in New York and New England. He later joined the Kendall Company with whom he remained for nineteen years, first serving as a sales representative for the Southeastern Section and their Sales Supervisor in the Midwestern Section and following the acquisition of Bauer and Black by Kendall, he was stationed in the Philadelphia office as District Sales Manager of both companies being responsible for sales volume along the Atlantic Seaboard Area. Later he became Merchandising Manager in Bauer and Black's home office in Chicago where he was in charge of merchandising policies and promotions for the country over.

In 1946 he became associated with Callaway Mills, Inc. in New York City as Sales Manager of their special products division. He has held this position until the present.

Textile Foundation Re-Elects Officers

Approximately 300 representatives of the textile industry from North Carolina, South Carolina, Virginia and other states attended the recent annual session of the North Carolina Textile Foundation, Inc., held at North Carolina State College. The Foundation made plans to make the institute's School of Textiles a greater center of education and research, re-elected its officers, named forty-five directors and heard addresses by the Chancellor of the College, J. W. Harrelson and Dean Malcolm E. Campbell.

Officers re-elected were: W. J. Carter, president; Dr. A. G. Myers, v.p.; David Clark, sec.; William H. Ruffin, treasurer; Aaron B. Quinn, asst. sec.-treasurer.

Directors, unanimously elected were: Charles L. Amos, High Point; Carl J. Beaver, China Grove; C. A. Cannon, Kannapolis; Joseph Carter, Atlanta; W. J. Carter, Greensboro; Thurmond Chatham, Elkin; David Clark, Charlotte; John W. Clark, Franklinville; Carl A. Cline, Hickory; Clyde Gordon, Burlington; Herman Cone, Greensboro; J. C. Cowman, Greensboro; S. W. Cramer, Jr., Charlotte; R. S. Dickson, Charlotte; A. M. Dixon, Gastonia; B. B. Gossett, Charlotte; Hugh M. Grey, Concord; P. H. Hanes, Winston-Salem; R. M. Hanes, Winston-Salem; Henry L. Harris, Galax, Va.

R. L. Harris, Roxboro; W. C. Harris, Winder, Ga.; Edwin Spier, New York; Alexander F. IX, Englewood, N. J.; Joseph P. Kelly, Burlington; K. P. Lewis, Durham; J. Harold Lineberger, Belmont; J. Spencer Love, Greensboro; George L. Lyster, Hickory; William Mebel, Charlotte; John F. Matheson, Mooresville; Reid A. Maynard, Burlington; J. Ed. Mills, High Point; H. A. Morris, Greensboro; A. G. Myers, Gastonia; W. H. Ruffin, Durham; W. P. Saunders, Robbins; A. Alex. Shuford, Hickory; K. S. Tanner, Spin-dale.

E. A. Terrell, Charlotte; W. W. Turner, Lynchburg, Va.; John K. Voehringer, Greensboro; G. W. Walker, New York; H. W. Whitcomb, Spray; and C. D. Williamson, Fort Worth, Tex.

Pressure Bolt

Thomas C. Wilson, Inc., 21-11 44th Ave., Long Island City 1, N. Y.—Line of safety release pressure bolts said to offer positive protection to all power and industrial owners and operators where safety is of the utmost importance.

The company states that the pressure bolt is fast proving a necessary safety factor in oil burners, strainers and for securing covers of many types of pressure vessels against unsafe opening; it is finding use in a wide variety of other safety applications as well. The bolt is actuated by the pressure within the vessel. A hole through the bolt body conducts the fluid under pressure to a piston within the bolt head and causes the handlebar to be moved and held out of bolt turning position. When under pressure the handle may be freely rotated without imparting turning movement to the bolt proper.

Extension Adapter

Lincoln Engineering Co., 3702-13 Natural Bridge Ave., St. Louis, Mo.—Extension adapter with pressure release for dispensing all-purpose lubricants. The model 5866 permits lubrication of points requiring low-pressure application such as Universal Joints, Water Pumps, Rear Wheel Bearings and other points with a high-pressure lubricant without danger of breaking bearing seals; the adapter may be quickly and easily attached to any standard hydraulic Coupler, according to the company.

Low Voltage Relay

Square D Company, 4041 N. Richards St., Milwaukee 15, Wis.—Time delay low voltage release relay designed for use with a separate motor starter and pushbutton station to provide automatic restarting of a motor after a momentary voltage fluctuation or power failure of a few seconds' duration.

If the power failure is prolonged more than a few seconds, the relay circuit times out, disconnecting the motor from the line, thereby protecting operators and machinery from unexpected restarting of the motor upon restoration of power.

Bar Bending Machine

Bethlehem Steel Co., Bethlehem, Pa.—Bar bending machine said to bend straight steel bars into zig-zag shapes for use as continuous web members in roof trusses. The bar is bent over adjustable dies by a roller, which enables a bar of any desired length to be fed straight into the machine. The roller, manip-



Bethlehem Bending Machine

ulated by a gear and cam, is arranged so the bar can proceed through the dies without obstruction.

The machine will make six to twenty bends a minute, according to the size of the bar, which is worked cold, the company states. The hand wheel adjusts the dies to form the varying angles and varying length of diagonals required in a roof truss.

NEW PRODUCTS



Portable Electric Grease Gun

Maynard Edwards, Inc., 116 1/2 S. Church St., Charlotte, N. C.—Brown portable electric grease gun, 23 inches high, 2 1/2 inches long, mounted on rubber tires and weighing about 230 pounds loaded. According to the company, 25 pounds of grease of any weight, from the heaviest fibrous to the lightest, will flow freely through a pressurized tank, even under low temperatures. A modified Ford Starter motor develops up to five horsepower on the pump through a series of gears running in oil. A thumbscrew adjusts a maxi-

mum grease pressure, from 500 to 12,000 pounds per square inch, nozzle pressure.

The company states a metering hand nozzle available on this gun can be adjusted to pass a tiny drop, or the largest shot of grease then stop until the trigger is pulled again. Any standard hand nozzle can be used on the gun. Built in the nose of the gun is a rectifier and drop cord for recharging the gun's battery. This machine is completely portable in that it requires no trailing wires or hoses.

Automatic Air Oiler

Bonvillian & Boneray, Inc., 107-83—80th Ave., Richmond Hill 18, N. Y.—Automatic air oiler said to solve the oiling problem for Jolt, Rollover, all molding machines and practically all pneumatic machines and tools. According to the company, the principle is simple but has never been applied in this manner before. Part of the air of the main air line is by-passed and bubbled through an oil reservoir; these bubbles in bursting atomize a quantity of oil; the by-passed air returns to the main line in "puffs" carrying with it the atomized oil.

The distinct advantages of this oiler are that there are no small orifices to become clogged with dirt; only air and oil-laden air pass through valves of sufficient aperture to prevent clogging, and consumption of oil can be regulated to minute quantities by simple adjustment of the air intake valve, according to the manufacturer.

Bench Blast Cabinet

W. W. Sly Mfg. Co., 4700 Train Ave., Cleveland, Ohio—Bench blast cabinet designed for the abrasive blast cleaning of small parts such as automobile pistons, dies, tools, castings, etc., is said to operate on the compressed air supplied by a standard SHP, a 2-stage garage compressor. The operator loads the parts through the top hinged cover and observes the work through the window in the cover. Operator's hands in the rubber gloves rotate the work in the blast stream.

Self-Adhesive Paper Tape

Topflight Tape Co., York, Pa.—Perfected self-adhesive printed paper tape, processed in rolls, can be used in the same way, and in the same dispensers as the cellulose Topflight tapes.

Paper tape costs less than cellophane or acetate fibre tapes and should prove popular for users who do not require the superior appearance and performance of the other tapes. Information, prices and samples are available on request from the company.

Reading Indicator

Wheeler Instruments Co., 647 W. Harrison St., Chicago 7, Ill.—Portable direct reading indicator for the determination of the ratio of lead and tin content in solder. With the indicator, up to 7% tin content of lead alloys may be tested in a matter of seconds, according to the company.

The manufacturer states that application of this instrument by users of solder, such as manufacturers of tin cans, etc., eliminates time consuming laboratory tests and results in considerable savings and improved product quality.

Fast-Drying Enamel

United Lacquer Mfg. Corp., Linden, N. J.—Fast-drying enamel said to reduce a manufacturer's finishing time by 40 per cent and cut his storage and handling requirements by 50 per cent. Known as Base Y 2054, the synthetic protective coating provides the hardness of a baked-on synthetic, but air dries as fast as lacquer, in just a few minutes.

According to the company, the synthetic offers a higher build, a better gloss where desired, tougher film, and high resistance to alkalis, fats, grease and smoke; it is equally effective on wood, metal, or fiber products. It may be polished to a hard gloss and has outstanding gloss and color retention, even under high humidity conditions.

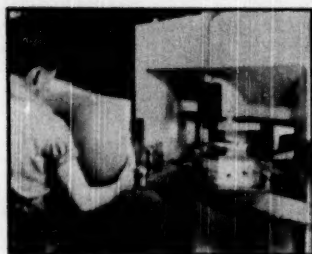
Safe Voltage Tester

Elwood Co., 410 W. Seneca St., Buffalo 2, N. Y.—Voltage tester said to afford full protection against exploding or serious arcing even when accidentally applied to a voltage as high as 4800V for as long as two seconds. The insulation will withstand 5000V safely assuring maximum protection against personal injury of linemen, plant electricians and electrical service men, according to the company. Its use facilitates speedy safe location of blown fuses, determines whether or not transformer tanks, metal covers or cases are grounded or energized, and warns of accidental high voltage in secondary circuits.

NEW PRODUCTS

Corner Draw Press

Vulcan Tool Co., 730 Lorain Ave., Dayton, Ohio—Development and production of a one corner at a time hydraulic drawing press known as the Vulcan-Draw, said to eliminate all of the costly die and labor operations usually associated with notched and welded corners.



Vulcan-Draw Press

The flat sheet is placed in position (one corner) in the Vulcan-Draw and the operator steps on an actuating pedal. In the normal few seconds hydraulic cycle the sheet is released with the corner completely drawn and finish sized, according to the manufacturer. By rotating, the other corners are formed, with specified over-all panel dimensions held.

Stationary Type Generator

Sight Feed Generator Co., West Alexandria, Ohio—A stationary type generator said to produce a continuous flow of acetylene is automatic in its operation. The generator is compactly built to occupy a minimum of space within the shop or generator house, and is designed to supply acetylene to points of usage throughout the plant by pipe line distribution in the same manner that water, compressed air and other utilities are handled in modern industry.

Known as the "A-Twin" Generator, the company states that the unit can be operated at any desired pressure up to 13 pounds per square inch.

PneuBin

Gerotol May Corp., Dept. E, Balto. 3, Md.—A solution to the problem of feeding stubborn materials through bins and hoppers is provided by the PneuBin, a pneumatic device, now manufactured by the company.

Pulsating PneuBin panels, strategically mounted on the inside walls of bins or hoppers, are said to keep materials moving by positive displacement, thus preventing arching, funneling and tunneling. Special advantages of the PneuBin include direct action on bin contents rather than the bin, positive extrusions, easy installation, quiet vibrationless operation, maximum safety and economy, according to the manufacturer.

Spray Washer

Industrial Filter & Pump Mfg. Co., 1631 W. Carroll Ave., Chicago 19, Ill.—Self-contained spray washer developed for washing intricate assemblies like typewriters, teletype machines, etc. The company states it is a convenience and a great time saver for railroads and other concerns who do their own maintenance and periodic cleaning of typewriters, teletype machines, and similar equipment; a thorough cleaning is accomplished in a very short time without disassembling these machines.

Chemical Pail

American Hard Rubber Co., 11 Mercer St., New York 13, N. Y.—Three-gallon chemical pail said to add greater safety to the handling of virtually any type of corrosive solution. According to the company, the pail will not chip or crack, because chemicals cannot penetrate the impervious surface. It is a tough, resilient high-styrene, copolymer rubber that provides an excellent combination of light weight, corrosion resistance and strength.

Feats of the pail is its carefully designed pouring spout which virtually eliminates costly, dangerous drip and keeps the corrosive chemicals from running down the sides of the pail, the manufacturer reports.

Electronic Inverter

Varo Mfg. Co., Garland, Texas—Model 421 Electronic Inverter said to provide an accurate, constant, precisely fixed frequency with regulated output voltage. It is one of various electronic power supplies developed for the military services and private organizations. The Inverter has a 3-phase output rating of 100 VA at 115 volts.

The unit is static in design, incorporating no revolving or oscillating switches, commutators, rings, brushes, governors, or vibrator contacts, thereby eliminating the difficulties encountered by the use of these components, according to the company.

Master Key Padlock

Dudley Lock Corp., Chicago, Ill.—Patented master key that can be duplicated on commercial key making machines is a special feature of the P-570 master-keyed Dudley padlock, according to the manufacturer. There are 375 master key designs. Every key assigned is registered to the owner of the locker installation and duplicates can be secured only from Dudley, after absolute proof of authority.

In addition to the master key feature, the P-570 is said to resist picking and tampering more effectively than conventional locks. Locking is automatic when the hasp is pushed home, the dial spinning away from the last combination number and all tumblers whirling to new positions.

Black Litho

Watson-Standard Co., 235 Galveston Ave., Pittsburgh 19, Pa.—Improved black litho for the metal decorating industry is primarily formulated for rollercoating. This black, Watson-Standard 10-197A is a blacker black, and according to the company, objectionable undertones common in most blacks have been eliminated. When fabricated into a closure or cap, the intensity of the blackness may be compared to that of a plastic molded closure. Complete information regarding this improved black may be obtained from the manufacturer.

Greasing Outfit

Alomite Division of Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago 14, Ill.—Two models of a portable "one man-one hand operated greasing outfit," for farm, industrial or automotive use. Model 7185-A, called the "Dyn-O-Luber," is equipped with a "Dyn-O-Mite" gun which weighs but two pounds and greases up to 55 bearings.

Model 7185-B, the "Dyn-O-Pistol," comes with a gun with nine-ounce capacity, described as "enough to grease the entire machine."

Two elements comprise this greasing outfit, a loading pump and a grease gun. The loading pump is mounted in a rigid steel

cover which fits the top of any standard 25 or 35-pound size original lubricant bucket or pail, replacing the original container cover. Three sturdy hook bolts hold the pump in a positive dirt tight seal on the container.

Gearshift Drives

The Lima Electric Motor Company, Lima, Ohio, announces the addition of a new unit to their line of Lima Gearshift Drives.

This Lima Drive, designated as the Type R3C, features a combination integrally mounted electric motor and a four-speed transmission having both primary and secondary gear reductions. This unit fills the need for a compact drive of modern design providing low, multiple output speeds.

Type R3C Lima Gearshift Drives deliver full rated horsepower in each of the four speeds and, both constant-torque and constant-horsepower two-speed motors are available on these units, which gives the increased flexibility of additional speeds.

Collet Attachment

Bell Equipment Company, 5212 Santa Fe Avenue, Los Angeles 58, Calif., announces the availability of the Walco quick-opening and closing Collet attachment, for whom they have been chosen exclusive national distributors.

This Collet attachment was developed to fill a need for an efficient, low-priced production type collet attachment with a one-inch collet capacity for the 1½-inch hole-in-spindle lathes and was engineered and developed in close conjunction with actual production methods and requirements.

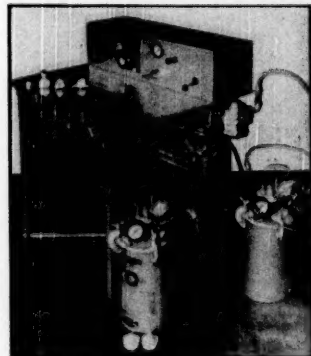
Plastilube

Warren Refining & Chemical Co., Cleveland, Ohio—Plastilube, an all-purpose lubricant which has no melting point, is adaptable for virtually every automotive and industrial use, say the manufacturers.

In addition to the non-melting feature, Plastilube possesses greater adhesive qualities, excellent pumpability at low temperatures and does not break down during working, according to the company. Further information may be obtained from the manufacturer.

Automatic Spray Machine

Conforming Matrix Corp., Toledo, Ohio—Machine for automatic spray decorating a variety of small plastic and metal parts, on a mass production basis, is said to be entirely air operated, and eliminates the hazard of electric motors and mercury of solenoid switches, as well as the cost of explosion-proof electrical equipment.



Spray Decorating Machine

By use of different electro-formed masks, which are readily interchangeable in the machine, and a resetting of the gun angles, many varied parts can be spray painted at speeds of from 700 to 3600 pieces per hour. Most parts can be handled at a rate of 1500 or more pieces per hour.

Diesel Engine

Ingersoll-Rand Co., 11 Broadway, New York 4, N.Y.—Type of diesel engine in the 195-375 hp range, designated as the TS diesel. According to the manufacturer, the diesel can easily be made portable, but is not automotive type; it is small in size, but with big engine design; light in weight, but with moderate speed; powerful, but with low exhaust temperature, perfectly balanced, but with no balancing devices.

Since diesel engines previously available in the 195-375 hp range have been either automotive type units at top limits of speed and rating, or de-rated, heavy, slow-speed engines, the TS diesel is said to fill a long felt need in the industry for an engine in the 900-1000 rpm range.

All Purpose Floor Machine

Bruer Electric Mfg. Co., 5100 Ravenswood Ave., Chicago 40, Ill.—Tornado all-purpose floor machine said to incorporate all seven of the features which operators have found helpful and practical. These features include: Rotary Safety-Grip Switch, Finger Tip Solution Control, Fully Adjustable Handle, Self-Raising Wheels, Automatic Brush Coupler, "Foam-Feed" Brush, Design, and Quick Change Snap-On Brush Rings.

All combine to give greater convenience and ease of operation, reduce fatigue, and therefore enable plant maintenance men to do more thorough work in far less time, save on maintenance costs, and provide cleanliness and sanitation quickly and easily, according to the manufacturer.

Burden Carrier

Lewis-Shepard Products, Inc., 261 Walnut St., Watertown, Mass.—The "TotMaster" Burden Carrier for use by railroads, steamship companies, industrial plants, express companies, warehouses, utilities, foundries, factory maintenance and repair service.

The "TotMaster," 2000 pounds capacity, has 21 square feet of loading space is powered by a 20 H.P. 4-cylinder high compression water-cooled engine, and is governor controlled for speeds up to 20 M.P.H. Further standard specifications include an electric starter, hydraulic airplane type brakes, seat operated parking brake, T handle steering, pneumatic tires, and two wheel drive through automotive type differential.

Collector Ring

Industrial Electrical Works, Omaha, Nebraska—Low cost collector ring for slow speed operation to carry current up to 75 amperes at 220 volts, for handling lights, devices and instruments which require running contact. The unit is said to cost only a fraction of other collector rings generally on the market today.

The ring is furnished with 1, 2, 3 or 4 conductors. Each conductor is precision machined and all parts are interchangeable. All have a double contact brush of a special alloy and are designed to retain constant tension. Prices and additional data may be obtained by writing the manufacturer.

Electromatic Steam Boiler

Siebring Manufacturing Company, George, Iowa, has announced a stationary, automatic electric steam boiler.

Ideal for producing either small or moderate amounts of steam up to full 90 pounds' pressure, this boiler meets the requirements of many users. It can be used as a steam cleaner and will handle two cleaning nozzles. Soundly constructed, the Siebring Electromatic Steam Boiler is made in strict accordance with A.S.M.E. specifications for working pressures up to 150 pounds and will stand a 300-pound cold water test.

Air Filter Gage

F. W. Dyer Mfg. Co., Chicago, Ill.—"Visa-Float" Air Filter Gage, designed to mount on the outside of the furnace, with a plastic tube

descending into the blower chamber, through the filter or filter frame, for quickly determining the condition of filters in forced air heating plants.

A difference or drop in air pressure from above filters to below filters, increases, a float rises in the transparent gage glass. When the float reaches the red mark in the Visa-Float's gage glass, the owner knows that the filters need renewing or cleaning. This Air Filter Gage is claimed to be foolproof, as there are no liquids, nothing to maintain or operate, and it is calibrated at the factory for permanent accuracy. For complete information, write direct to the company listed above.

Automatic Timer

Midwest Automatic Control Co., 510 Third St., Des Moines, Iowa—Midwest Automatic Timer, a device designed to reduce the burden of footwork and the risk of human error in operating the screens and pumps in power plants and other municipal and industrial plants. The device controls the timing of operations of screens and pumps by means of an automatic rotor timer and an integrated system of wire terminals and controls enclosed in a single cabinet.

According to the company, one person at a single point can thus control the operation of machinery at several points in one or several buildings. Any number of pumps and screens can be operated for any desired periods of time from the Automatic Timer.

Laboratory Device

General Electric Co., Schenectady 5, N. Y.—Compact, semi-portable device for low-temperature testing of ball-bearing lubricants. Lubricants for ball bearings in such applications as aircraft gun turrets must be effective at temperatures as low as 55 degrees below zero, G-E engineers explained. The new laboratory device simplifies testing problems since it eliminates the need for elaborate cold rooms, they said.

In testing, a ball bearing is placed on a spindle in the inner bucket and rotated by a small electric motor. The tendency of the outer ring of the ball bearing to move with the inner ring is measured by a strain gage. If a lubricant under test thickens in the cold atmosphere, the inner ring will not turn freely, and the gage will register a greater strain on the outer ring.

Silver Alloy

Air Reduction Sales Co., 60 East 42nd St., New York, N. Y.—Five-ounce packets of Easy-Flo 45, a silver alloy for brazing ferrous, non-ferrous and dissimilar metals, has been added to the oxyacetylene welding line of the more than 800 Air Reduction authorized dealers.

The Easy-Flo packets contain a 5-ounce coil of 1/16 inch wire, instructions for use, and a folder giving complete details about the product. According to the manufacturer, this silver brazing package should find acceptance by repair and maintenance crews, in small shops and in shops doing experimental work.

Fork Truck

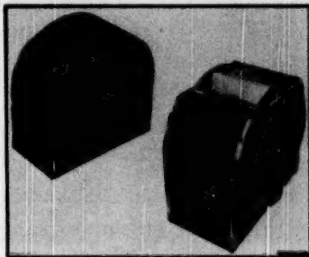
Edwell-Parker Electric Co., Cleveland, Ohio—Medium weight electric power fork truck for fast action handling loads weighing up to 4000 pounds. In tiering operations the truck lifts to a base height of 130 inches in 26 seconds; going up light, the fork attains the full 130-inch height in 15 seconds, and it lowers a capacity load from same height in 16 seconds, according to the company.

Truck's overall length with 36-inch fork is 116 inches; width, 41 inches; height with up-rights telescoped 83 inches. It has a short turning radius, 74 inches in intersecting aisles; 134 inches in right-angle aisles. Wide gauge rear or trailing axle provides extra stability for truck and load.

NEW PRODUCTS

Key Locked Covers For Files

Horning-Hall-Marvin Safe Co., Hamilton, Ohio—Removable key-locked covers for small, hand-operated, desk-type, Rotary record files. It is claimed that the covers will enable users to house confidential records in the Hand Models, as securely as in the large, electrically operated floor models of the Rotary Record File.



Rotary Record File

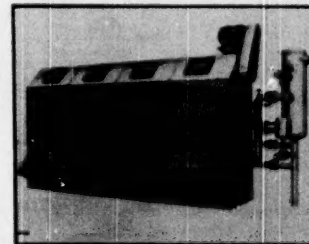
According to the company, the covers are small enough to be placed in a desk drawer when removed from the files; one turn of the key locks the covers securely in place to prevent unauthorized access to the records, and also prevents rotation of the file.

Working Platform

Atlas Industrial Corp., 819-39th St., Brooklyn 32, N. Y.—Improved Marquee Servicer for overhead maintenance, painting, lighting, cleaning, etc. It is only 4 feet 8 inches in height and raises to 11 feet 6 inches. The base is 28 inches by 4 feet, and the stock platform is 2 feet by 4 feet. Special sizes can be made to order. The raising mechanism is by hand-operated Winch with self locking worm gear held by two steel cables. According to the company, this safe working platform is easily rolled, easily raised.

Vertical Air Conditioners

York Corp., York, Pa.—Six models of industrial dry coil, vertical type air conditioners available in six sizes ranging up to 25,000 CFM per unit. These air conditioners are said to be ideally suited for refrigerated storages, and are widely used in dairy, ice cream, meat packing, brewery and other processing plants in addition to cold storage warehouses.



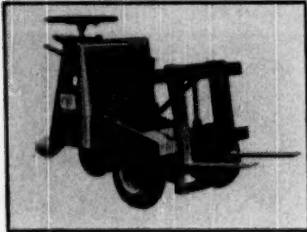
York Air Conditioner

The coils are arranged for flooded operation with high or low pressure float control or liquid refrigerant pump recirculation. The water or brine defrosting arrangement, furnished when required, consists of full weight galvanized pipe headers and laterals with cast bronze spray nozzles.

NEW PRODUCTS

Hydraulic Lift Attachment

Kwik-Mix Co., Port Washington, Wis.—Hydraulic lift attachment for the Moto-Bug said to increase the unit's usefulness in special handling problems, particularly in industrial plants, shops and in construction work.



Moto-Bug Attachment

The manually operated hydraulic pump lifts a capacity load of 500 pounds. Forks tilt to the rear to assure better load balance and are adjustable to a minimum width of 33 inches for clearing narrow aisles and doorways. Further information may be obtained by writing the company.

Security Studlocs

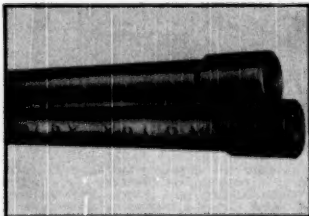
Security Locknut Corp., 1815 N. Long Ave., Chicago 30, Ill.—Elliptical spring steel retainers like those originally developed for security locknuts have been applied successfully to the locking of studs, bolts and other threaded parts in mechanical assemblies. In use, the stud or bolt forces the elliptical retainer into circular shape, creating rigid locking pressure on the threads. The stud or bolt may be adjusted to any position and will remain in position regardless of severe vibration, according to the manufacturer.

The retainer floats in a counterbore and carries no load. All tension or compression stress load on the stud or bolt is carried by threads in the tapped hole.

Yoloy Pipe

Youngstown Sheet & Tube Co., Youngstown 1, Ohio—Yoloy weld pipe said to afford distinct advantages for use where piping is concealed in industrial plants, commercial buildings and residences. The company reports the pipe is easy to weld, bends and fabricates readily; its tensile strength is high; it is resistant to abrasion, and its resistance to shock and vibration is high.

According to the manufacturer, Yoloy has an atmospheric corrosion resistance from four to six times that of regular carbon steels. Its resistance to many other corrosive elements likewise is high, making Yoloy pipe particularly well adapted for use in the railroad, oil, mining and chemical process industries.



Yoloy Weld Pipe

Oil Bracer

Power Ball Oil Co., Inc., 911 Hager St., Columbus, S. C.—"Power Ball Friction-Proof Oil" said to instantly boost the lubricity and performance life of any oil or grease to which it is added. According to the company the oil prolongs the life and greatly increases the efficiency of diesel, gasoline and electric motors and engines as well as piston, gears, cutting tools and all moving machine parts.

Additional outstanding features of the versatile oil bracer are its excellent rust-proofing, detergent, and penetrating properties, reports the manufacturer. If further information is desired, please write to Mr. Jerome D. Shanman, c/o company listed above.

Shearcutting End Mill

The Shearcut Tool Company, P. O. Box 746, Reseda, Calif., has developed and perfected a new shearcutting type of end mill which applies the Rotary Broaching technique to milling machine operation.

Shearcutter end mills are ground from the solid after having been hardened to a Rockwell "C" reading of 63 to 65, assuring a keenness to the cutting edges which can be achieved in no other way.

This new type end mill has an extremely deep counter bore on its cutting end so that it may be resharpened many times before it is worn out. It is easily resharpened on any tool and cutter grinder, without resorting to special fixtures and set up operation. The only special requirement being a rigid finger to engage the high angle helical flutes to assure uniform contact with the grinding wheel.

Hand Sighting Level

Binoscope Co., P. O. Box 9384, Phila. 39, Penna.—Precision built hand sighting level, measuring five inches in length for accurate alignment when laying drains and foundations, contouring, grading, etc.

Users of this instrument claim that no difficult figuring is required and that the simple instructions provided make it easy for even inexperienced persons to make surprisingly accurate calculations.

Hydraulic Cutter

Manco Mfg. Co., Bradley, Ill.—Portable hydraulic cutter that is said to have unequalled capacity for cutting large-diameter chain and rod. Called the Manco Guillotine Model 20-D, it has a capacity for quick cutting of reinforcing rod, stainless steel, and Monel rod of three quarter inch diameter, mild steel rod of 1 inch diameter, 1 inch soft chain and three quarter inch hard chain, according to the company.

The cutting unit has an open "C" frame anvil that will also accommodate hex-shaped and square material for cutting. Tremendous cutting power, according to the manufacturer, is afforded by the Guillotine which is rated at 22½ tons thrust.

Saw Table

Porter-Table Machine Co., Syracuse, N. Y.—Tilting Arbor Saw Table designed for use with its Speedmatic Portable saws. One of the outstanding features of the Saw Table is its portability, weighing only 44 pounds. It can easily be carried in one hand, the company states. The top of the table is designed to flip over to allow 60-second attachment of the portable saw in position. When dropped back into place, the table automatically locks in position.

According to the maker, the saw answers the need of contractors and builders for a sturdy, yet portable table saw for accurate cutting at the building site. This eliminates the necessity of pre-cutting the work back at the shop or transporting a heavy, expensive table saw or radial saw to the job.

Load Stabilizer

Towmotor Corp., Cleveland, Ohio—Load Stabilizer developed especially for the soft drink industry for the rapid handling of full pallet loads of bottle cases and similar multi-unit loads. The attachment clamps the load in position and permits safe, speedy lifting, carrying and stacking; completely eliminates breakage and other hazards in transporting wobbly, unsteady loads of bottle cases, according to the manufacturers.

It consists of a flat, rubber-covered steel plate mounted at the top of the special carriage extension; a double acting hydraulic cylinder permits the plate to be lowered or raised over the load.

Electric Hoist

King Mfg. Corp., 3146 W. Chicago Ave., Chicago 22, Ill.—Line of electric powered hoists featuring an electric brake on the motor and a built in clutch on the spool which will slip if hoist is overloaded, say the manufacturers. These features make these hoists ideal for operating merchandise elevators with either one or two platforms. Hoisting is at the rate of 100 feet per minute, the corporation reports.

Designated the 800 Series, there are five models with capacities from 600 pounds to 3000 pounds. Hoisting capacity can be increased and speed decreased by using sheave block and double, or more lines.

Grease Fitting

Lincoln Engineering Co., St. Louis, Mo.—All-purpose grease fitting with features that will be of prime interest to all contractors said to be the first outstanding improvement in grease fitting design which permits contact by all commercial hydraulic couplers, has the following features, as stated by the manufacturer: Protects bearings. Insures volume flow. Special spring design. Speeds up lubrication. Easy to contact. Universal application. Sturdier Construction. Long service life.

For detailed specifications, write for Bulletins 708-1 and 708-2, Lincoln Engineering Co., 5702-63 Natural Bridge Ave., St. Louis 20, Mo.

Rayon Spinning Machine

Harry A. Kuljian, a Philadelphia engineer, and head of one of the busiest engineering and construction firms in the United States, has invented a new rayon spinning and processing machines which is now ready to be placed on the market.

Textile experts who have had a preview of the machine have expressed the opinion that it will rank in epoch-making importance with the invention of the cotton gin by Eli Whitney. The most startling feature of the Kuljian machine, according to the inventor, is the fact that process which now takes from four to five days by the customary "poc-spinning" method—from the viscose solution to the finished yarn on the bobbin—is actually completed in three and one-half minutes. And what is more—the finished yarn is said to be a better product in every way—more uniform, of superior quality, better for dyeing, and easily adapted, by simple controls, to any desired combination of properties for varying types of yarn to meet specific needs.

The consumer might well pay lower prices on all products using rayon—including automobile tires—when the Kuljian process is widely adopted. The inventor points to the following money-saving advantages all along the line: less capital investment, less plant, less time for installation, cheaper maintenance, lower production cost, less handling, greater output per spindle, elimination of damaged yarn, higher quality yarn at less cost, quicker change-over for varying types of yarn, less cost and less trouble for plant expansion, and more efficiency in the subsequent stages of manufacture of rayon products.

Sixteen years of "spare time" have gone into the development and perfecting of the machine. Against a background of solid engineering achievement, the claims made for the new Kuljian invention are certain to command the concentrated attention of the rayon industry.



LEROY A. WILSON
President of the American Telephone and Telegraph Co. Started as a traffic student in Indianapolis in 1922 at \$110 a month.



ALLERTON F. BROOKS
President of The Southern New England Telephone Co. Started as an engineer's assistant in New Haven in 1911 at \$12 a week.



JAMES L. CRUMP
President of the Southwestern Bell Telephone Co. Started as a lineman in Winfield, Kan., in 1905 at \$25 a month.



HAL S. DUMAS
President of the Southern Bell Telephone and Telegraph Co. Started as a traffic student in Atlanta in 1911 at \$50 a month.



RANDOLPH EIDE
President of The Ohio Bell Telephone Company. Started as a special inspector in New York City in 1911 at \$15 a week.



WILFRED D. GILLEN
President of The Bell Telephone Company of Pennsylvania. Started as a clerk in Philadelphia in 1923 at \$117 a month.



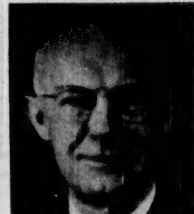
HARRY S. HANNA
President of the Indiana Bell Telephone Company. Started as an engineer in Cleveland in 1922 at \$250 a month.



JOE E. HARRELL
President of the New England Telephone and Telegraph Company. Started as a clerk in Atlanta in 1913 at \$14 a week.



WILLIAM A. HUGHES
President of the New Jersey Bell Telephone Co. Started as a ground man in Kansas City, Mo., in 1917 at \$60 a month.



THOMAS N. LACY
President of The Michigan Bell Telephone Company. Started as an insider in Philadelphia in 1905 at \$10 a week.



H. RANDOLPH MADDOX
President of The Chesapeake & Potomac Telephone Co. Started as a student engineer in Washington in 1921 at \$30 a week.

UP FROM THE RANKS



GRAHAM K. MCCORKLE
President of the Illinois Bell Telephone Company. Started as an office boy in Eminence, Ky., in 1902 at \$20 a month.



KEITH S. McHUGH
President of the New York Telephone Company. Started as a clerk in New York City in 1919 at \$35 a week.



EUGENE J. McNEELY
President of the Northwestern Bell Telephone Co. Started as student engineer in St. Louis in 1922 at \$110 a month.



JAMES B. MORRISON
President of the Wisconsin Telephone Co. Started as engineering assistant in Washington, D. C., in 1925 at \$120 a month.



FLOYD P. OGDEN
President of The Mountain States Telephone and Telegraph Co. Started as student and clerk in 1911 at \$40 a month.



MARK R. SULLIVAN
President of The Pacific Telephone and Telegraph Company. Started as a clerk in San Francisco in 1912 at \$50 a month.

THESE are presidents of operating telephone companies of the Bell System. They all started at the bottom of the ladder.

Twelve years ago the Bell System first published an advertisement like this, except that there are now sixteen new faces in the pictures.

The Bell System is an up-from-the-ranks business and it aims to keep the opportunity for advancement

open to all. That has been true of the business for many years and nowhere is it better illustrated than in the careers of the men who now serve as presidents of Bell Telephone Companies throughout the country.

They have had wide telephone experience. Together they have put in 598 years of service, an average of 35 years each.



BELL TELEPHONE SYSTEM

Stock Record

(Continued from page 23)

ter is usually in evidence when there is a decline in prospect for the future purchasing power of the dollar. As in most bull markets, however, speculative enthusiasm shifts from group to group. For a while radio and television stocks were the leaders and the first quarter earnings reports which are beginning to be issued indicate the prosperity which they are enjoying. More recently chemical and pharmaceutical stocks have been advancing rapidly due in part to the success of many companies in marketing new antibiotic and other medicinal products.

At the turn of the year there had been a substantial segment of investment opinion which leaned to the idea that the second half of 1950 would witness some decline in the tempo of business. Views of this character are not nearly so widely held now because the protracted coal and Chrysler strikes and their ramifications have projected further into the future the date when supplies of steel and automobiles would exceed current demands. Furthermore, while the discussion of revenue bills has not yet become an important part of Washington news the ultimate results in the form of legislation are not likely to bring disappointment to investors to any large degree. One of the few discouraging features has been the violence with which the opponents of the Kerr-Harris Bill providing for the regulation of natural gas at the field have denounced the proponents of this measure. Another was the asperity with which the members of the Congressional Joint Committee on the Economic Report attacked the large steel companies and claimed that competition no longer existed in that industry.

It was only a little over a year ago that Washington and some of the prominent labor leaders were complaining that the steel industry was remiss in not expanding quickly enough to take care of growing demands. Public threats were made that if the companies did not take prompt steps to alleviate the then shortage in supply the government would move in and build one or more plants of its own presumably not only to augment supplies but to furnish some sort of a "yardstick." Proposals of this character rapidly faded out when shortages turned into surpluses during the Summer. The steel industry has been subjected to three separate investigations by the Joint Committee on the Economic Report since V-J Day. In addition, there have been long drawn out hearings occasioned by the pension and welfare demands of the Steelworkers Union C.I.O. last Fall which resulted in the report of the Presidential Fact Finding Board. For years the steel companies have literally lived in a statistical goldfish bowl, but it does not seem to matter whether there is a shortage or a surplus of steel, Washington never seems to be satisfied.

All of the above will certainly not re-

sult in increasing the appetite of the investor for the purchase of shares in basic

industries at a time when this is particularly important for the economy.

Virginia Firm Producing Popular Lightweight Building Block

A prepared lightweight aggregate is being manufactured for producers of concrete masonry units by the Southern Lightweight Aggregate Corp., Richmond, Va. The aggregate, a light (57 pounds per cubic foot), cellular, inert, burned slate material, bears a close resemblance to haydite in chemical and physical properties, and its performance in concrete is said to compare very favorably with that material.

Before the final selection of a site Southern conducted an investigation program that covered four states and 46 different deposits of the shaly-slate material. Brems Bluff, finally chosen to be the site, is 60 miles due west of Richmond. It was one of four in the "semi-finals" due to quality alone, but its location in relation to large consuming centers was the determining factor. The company controls about 190 acres of the deposit which is being worked on a "face" 300 feet in width.

Overburden, consisting largely of eroded slate with some clay folded into it, consists chemically of silica—55 to 60 per cent; alumina—25 to 30 per cent; carbonates and other oxides—10 to 15 per cent. Since the material at lower depths is not as suited as surface lighter density material, extraction is performed by a blast and a strip method. One blast, consisting of about a dozen dynamite holes spaced 12 feet apart, supplies enough material to run the plant for two months. The "faw feed" is stored behind a retaining wall opposite the feed end of the rotary kilns. Enough feed is available to the conveyor belts to supply the kilns for 2½ days without grinding additional material from the quarry.

The kilns are 6 feet in diameter, 100 feet long and they slope ¾ of an inch per foot. At a speed of 1½ RPM the slate is retained in the kilns about 40 minutes, reaching a temperature of 2,500 degrees F. At times temperatures to 3,000 degrees are required to "burn" the material. Fuel (pulverized coal) for such temperatures is fed into the kiln by a closed circuit air swept mill at the rate of 5,200 pounds per hour.

The shaly-slate particles in travelling through the kiln acquire a vitreous coating which seals in gases formed by chemical changes, thus causing the material to expand into clinkers that contain the countless small cells responsible for its light weight. Clinker is discharged from the kilns to an open pit from which it is moved to a cooling storage pile. Upon cooling, the material is fed to the grinding circuit where railroad cars await the finished product.

In concrete the material takes the place of gravel and sand with sizes ranging

from ¾ down in the coarse size and from minus ¾ down for sand sizes. Because of its light weight the material has been used extensively in the building of roofs where strength and lightness were important factors. At the present time a Richmond parking building is under construction at the corner of 7th and Franklin in which case use of the aggregate is considered ideal.

The concrete masonry blocks are made from sizes ranging from ¾ down to and including dust. The aggregate is already prepared for the block manufacturer's use in which case they may be produced under the same Solite providing no other aggregates are used in their production. As compared with yields for most manufactured lightweight aggregates of about 55 blocks per cubic yard of aggregate, it is claimed that Solite yields from 72 to 78 blocks in addition to being one-third lighter than concrete blocks of the same size.

The 7th Street Christian Church, now under construction, is incorporating Solite blocks in an unpainted Flemish Bond pattern which gives the interior a rustic, distinguished appearance. The exterior is a brick veneer, i.e., the Solite walls are encased in a one-brick-thick wall.

A demand of 7,000,000 cubic yards per year is not nearly met by the present 2,250,000 production. However, a third kiln is nearing completion with a fourth to be finished by the end of the year which should meet the present demand. Southern's affiliate, Southern Materials Co., Inc., of Richmond, has installed a separate "batching" plant solely for the handling of lightweight concrete, according to A. Cabell Ford, Director of Sales for Southern Lightweight Aggregate.

Beaunit Mills Reaches Full Production At Childersburg

It is reported that the new Beaunit rayon plant at Childersburg, Alabama, has recently reached full production. Built by Daniel Construction Company, of Greenville, South Carolina and Birmingham, Alabama, and designed by Lockwood Greene Engineers, Inc., this rayon plant, the first in Alabama, covers more than seven acres of floor space.

Totally enclosed and air conditioned, it is producing continuous filament yarn and is expected to reach a capacity in excess of ten million pounds per year. The cost of the project including all equipment is estimated to have been about fifteen thousand dollars. The output of the plant will be used in the manufacture of famous Beaunit fabrics.

Southwestern Gas Plans Expansion at Knox Lee Plant

Frank M. Wilkes, president of Southwestern Gas and Electric Company, has announced plans for an expansion program that will double the capacity of the company's new Knox Lee power plant on Lake Cherokee in Gregg County near Longview. The expansion program will include installation of the second 35,000-kilowatt generating unit. The first unit was placed in operation early this year and the new unit is expected to be operating in early 1951.

Plans have been announced to build eight miles of 132,000-volt transmission lines to Southwestern's substation at Longview for distribution throughout the East Texas area. Longview alone added 594 new electric customers last year. The company now serves 8,732 customers in Longview.

Southwestern will spend \$1,380,000 on new transmission and distribution equipment in the East Texas area in 1950. A 4½ mile, 66,000 volt transmission line will be built to complete a high-voltage loop through Henderson in order that automatic switching equipment may be installed in the Henderson substation. Other expansion will increase electric capacity at substations in London, Gilmer, Gladewater, Kilgore, Marshall Water Works and Carthage.

International Minerals Plans Expansion In Florida

One of the most important expansion and development programs ever to be undertaken in the Polk county phosphate fields was announced recently by Louis Ware, president of International Minerals & Chemical Corporation, Chicago, Illinois, before a joint meeting of the membership of all civic clubs in Bartow, Florida.

Principal projects in International's new program, which when completed will represent an investment of approximately \$4,000,000, include: (1) plans for the erection of a new office building as headquarters for the company's Florida phosphate operations, (2) purchase of a site for location of the new office building, the property being acquired for this purpose consisting of a 60-acre tract south of Bartow's city limits, (3) plans for construction of a new plant for the manufacture of multiple superphosphate and phosphate chemicals, including dicalcium phosphate for animal feed and chemical purposes, (4) plans for the construction of a new large sulphuric acid plant, (5) plans for the construction of a new, modern machine shop, warehouse and service center to serve all the company's Florida operations and which will be located at the Noralyn mine, (6) plans for erection by the company of a new

phosphate division analytical laboratory.

In announcing the new chemical plant, Mr. Ware said it marks the entrance of the company into an entirely new field, that of phosphate chemicals, and that this project is consistent with International's policy of diversification of activities.

American Can Operating Large Metal Lithograph Plant At Tampa

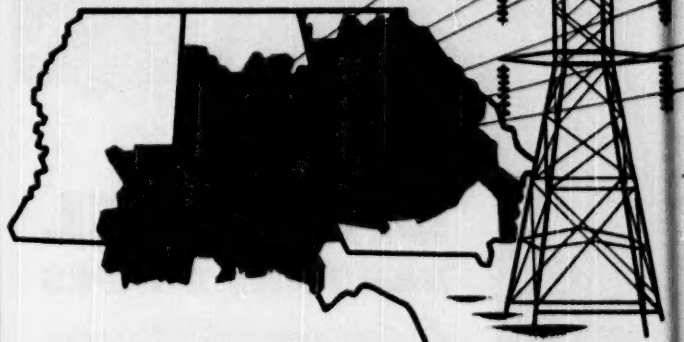
The largest metal lithographing plant in the South is now in operation at the local factory of the American Can Com-

pany, Tampa, Fla., it was announced recently by C. E. Cummings, plant manager.

The new installation, occupying 25,000 square feet of floor space, is slated to be doubled in size by early 1951 because of the spectacular popularity of Florida's frozen concentrated citrus juices, Cummings said. It is operating on a basis of two shifts per day, and processing the equivalent of 1,500,000 cans daily.

The lithographing lines are being manned by 24 Tampa factory employees, who have attended special six-months training courses at company factories in Atlanta, Savannah, Philadelphia, Boston and Richmond.

BETTER SERVICE for a BETTER SOUTH



The future of The Southern Company is inextricably bound up with the region that it serves.

Through its four operating associates (Alabama Power Company, Georgia Power Company, Gulf Power Company and Mississippi Power Company), electric power is supplied throughout most of Alabama and Georgia, northern Florida, and southern Mississippi.

By coordinating their power sources located in these four states, the operating companies provide *adequate power at the lowest cost* consistent with a high degree of service reliability.

The four states served comprise an area of great industrial and agricultural wealth. More than 80,000 stockholders of The Southern Company throughout the nation are vitally interested in this region. The profitable development of the South's vast resources, which is essential to the South's industrial growth, requires accessible inexpensive power.

The South and The Southern Company are both growing...together.


The
Southern Company
 ATLANTA, GEORGIA

Coal Tar By-Products Plant Announced for Daingerfield, Tex.

Plans were announced in Dallas for the construction immediately of a coal tar by-products plant costing over \$500,000 at Daingerfield, Texas. The new plant will use the entire output of coal tar from the plant of the Lone Star Steel Company coke plant located near Daingerfield.

The new plant will be built and operated by the Reilly Tar & Chemical Corporation of Indianapolis, Indiana, and the steel company will share in its profits. The Reilly Company is one of the largest in the field of coal tar chemicals and

manufactures and operates fifteen plants over the nation. The company was founded in 1905 by Peter C. Reilly, president. The company now manufactures direct coal tar materials and a large number of more refined coal tar chemicals. The company now lists more than 300 products. The new Texas plant will produce exclusively for the Southwest market.

The new Reilly project is the second new plant to be announced in March for the use of Lone Star Steel products. The parent company plans to construct a castiron pipe manufacturing facility at the steel plant site.

E. B. Germany is president of the steel company.

C P & L Devises Electrical Blanket For Piping

Faced with new problems created by a novel type of steam electric generating plant, engineers of Ebasco Services, Inc., have come up with an insulating process which, it is believed, will guarantee continuous flow of water to the Lumberton plant of the Carolina Power & Light Company, in so far as freezing is concerned.

The problem arose because the new 120,000-horsepower plant at Lumberton is of semi-outdoors construction, and consequently many of the pipes there do not have the protection of the housing of conventional plant.

Engineers first installed standard two-layer hot pipe insulation. Around this, they placed a layer of aluminum foil, secured in place by special tape. Next was installed electrical resistance cable, either parallel to or wound around the insulated pipe. Next, a second layer of aluminum foil was placed over the heating coil, or cable. Principal function of the foil is to distribute the heat generated by the resistance wiring. Some 14,000 square feet of foil was used.

This second layer of aluminum foil was then covered by three layers of $\frac{1}{8}$ -inch asbestos roll board.

Over all this was placed a final weatherproofing of corrugated aluminum sheets, held in position by the special tape. The final aluminum jacket not only provides a weatherproofing, but by its nature of being highly resistant to oxidation will not corrode and thus require maintenance painting.

So, when and if a severe cold snap hits Lumberton, and if the elaborate insulation is believed insufficient to keep the water liquid, all the engineers have to do is shoot a little juice through the special electric blanket.

Shell Oil Builds Gasoline Extraction Plant in Oklahoma

W. A. Alexander, area manager for Shell Oil Company, Tulsa, announces plans for construction of a large-scale gasoline extraction plant in the Elk City field, located in Beckham and Washita Counties, Oklahoma. Construction is already underway.

The new Shell plant when completed will be capable of handling approximately 100 million cubic feet of gas daily. Mr. Alexander said, and will be designed to permit the adoption of facilities to provide cycling, repressuring and crude oil stabilization.

The completion by Shell of a discovery well, J. G. Walter No. 1, in November, 1947, opened one of the larger oil fields in the mid-continent area.

Total investment of Shell and other companies in the field is expected to exceed \$32 million by the end of this year. It is estimated drilling alone represents a direct investment of about \$8 million.



DIXISTEEL BARS AND SHAPES

Southern made for Southern needs

More and more Southern manufacturers and fabricators are using DIXISTEEL Bars and Shapes—made from our own high-quality, open-hearth steel to meet the most exacting requirements.

Available in a wide variety of shapes, sizes and grades—plain or galvanized. Flexible rolling schedules assure prompt shipment.

Write today for complete information.

Atlantic Steel Company

DAINGERFIELD DIXISTEEL CO. INC.

ATLANTA, GEORGIA

Public Service Commission Approves Gas Co. Application

The Public Service Commission of South Carolina has recently approved the application of the South Carolina Electric & Gas Company, Columbia, S. C., proposing to acquire the assets and assume the liabilities of its wholly-owned subsidiary, South Carolina Power Company, upon the surrender of its stock for cancellation, and also the proposal to re-finance the outstanding bonded debt of South Carolina Electric & Gas Company by the issuance of a like principal amount of new bonds, utilizing the assumed indenture of the subsidiary as the financing vehicle. The Federal Power Commission has the matter under consideration, and they are hopeful of an early order from that agency whereupon they will proceed promptly with the program.

Laclede Steel Schedules Operations In New Orleans

A steel processing plant will start operations at the Micheaud Industrial Facilities of New Orleans, within the next month or so. The Laclede Steel Company, operators of the new plant, plans to bring steel from its plant at Alton, Illinois, and process it for use in the construction industry.

Georgia Dept. of Commerce Issues Industrial Brochure

Georgia State Department of Commerce, Atlanta, Georgia, recently released an attractive booklet entitled, "Industrial Georgia, The Empire State of the South" which presents a brief resume of the industrial background of this great state. Many pictures are shown describing Georgia's raw materials, water-fuel-power, transportation, climate, manufacturing and living conditions. As the booklet states, "... here is a state that is rich in resources, rich in historic interest, a state that provides rich advantages for a healthful, wholesome life to its people."

\$6 Million Expansion Program For Port of New Orleans

A new \$6,000,000 wharf expansion program for the port of New Orleans has been approved by its Board of Commissioners, and will begin late this year, when the \$2,500,000 wharf projects now underway are complete.

In an announcement made this week Robert L. Simpson, president of the Board of Commissioners, said that the new program calls for the rebuilding of three wharves, namely, those at Toulouse St., Dumaine St., and Governor Nicholls St., in order to completely modernize

them. In addition, the port's commodity warehouse, the existing wharhouse, will be widened.

E. A. Vermere Co. Plans Expansion Near Hot Springs

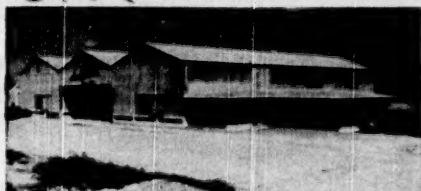
The E. A. Vermere Company, manufacturer of aluminum valve handles and lock nuts for the plumbing industry, is planning to move from Los Angeles, California, to a proposed new \$250,000 plant near Hot Springs. Major factors in the move were accessibility of aluminum pig and the availability of skilled labor.

A. J. Phillips Dies, Former Adv. Mgr. Hajoca Corp.

Arthur J. Phillips, who retired as advertising manager of Hajoca Corporation in 1948, died in his home, 274 S. Felton St., Philadelphia, at the age of 75 on February 24th. Mr. Phillips entered the employ of Haines, Jones and Cadbury, forerunner of Hajoca Corporation, in 1903 and remained with this company with the exception of a period of six years, (1905 to 1911) during which time he was employed with the U. S. Envelope Co. of Worcester, Mass. Ill health forced Mr. Phillips' retirement in 1948.

A "HUFF AND A PUFF"

won't blow
this building down



Among other advantages Armco PIONEER Steel Buildings fight back against stormy weather. They are designed to withstand high winds and driving rains. Corrugated metal sheeting and roofing keep the building weathertight, fire-resistant, and lightning-safe when properly grounded.

Although mass produced for greater economy, PIONEER Buildings are readily adaptable to your individual needs. They can be of any length, with widths from 20 to 100 feet clear span, and heights to 24 feet. Doors, windows and ventilators can be placed where you want them.

A trained Armco crew quickly

erects the building—ready for wiring, plumbing, or inside finishing. All you need is the foundation. If desired, Armco will help you with the design.

For smaller structures, Armco STEELOX Buildings save you money. That's because STEELOX panels provide both structural support and finished surface. They're easy to handle, too; so that an unskilled crew can erect the building in a matter of hours. Labor costs are low.

Buy Armco PIONEER or STEELOX Buildings for warehouses, garages, shops, offices, factories, or wherever you need dependable, low-cost shelter. Write today for complete information.

ARMCO DRAINAGE & METAL PRODUCTS, INC.

DIXIE DIVISION

524 Forsyth Bldg.

SOUTHWESTERN DIVISION

3500 Maury St.

Other Offices in Principal Cities

Atlanta, Georgia

Houston, Texas



ARMCO STEEL BUILDINGS

FINANCIAL NOTES

Increased traffic and a greater dieselization of the road have been instrumental in boosting net profit of the **Louisiana & Arkansas Railway Co.**, this year. The wholly-owned subsidiary of Kansas City Southern Railway Co., according to preliminary figures, earned nearly \$820,000 in the first quarter of 1950, compared with about \$620,000 in the like 1949 period.

Western Maryland Railway of Baltimore, Md., expects to report net income of \$518,000 for March. This would compare with a net loss of \$31,143 for the preceding month and net income of \$452,502 for March, last year.

For the first quarter of 1950, preliminary figures indicate a net income of about \$624,000, equal to \$3.51 a share on 177,420 shares of 7 per cent cumulative first preferred stock, in arrears as to dividends. For the initial quarter of 1949, net income was \$1,523,724, or \$8.59 a share on the first preferred.

Eastern Stainless Corp., of Baltimore, Md., in its annual report for 1949, reported a consolidated loss for the year of \$252,705, which contrasted with a consolidated net income of \$542,511 in 1948. The adverse showing, John M. Curley, chairman and president, declared in his remarks to stockholders, "was the result of several factors, one of which was declin-

ing sales and production which resulted in a contraction of 18.4 per cent in net value of shipments to \$12,057,800 from the 1948 level of \$14,766,843.

A decrease of \$16,797,978 or 47 per cent in the **Norfolk and Western Railway's** 1949 balance of income from the previous year was attributed principally to a sharp drop in bituminous coal shipments from mines served by the company, according to the road's annual report, released recently. Coal traffic declined from 51,903,000 tons in 1948 to 34,703,000 tons in 1949, a reduction of 33 per cent.

The railroad reported a 1949 gross income of \$158,684,045, a decrease of 21 per cent from the previous year, and total expenses of \$137,752,758, a decrease of 15 per cent. Balance of income (net income less sinking funds and miscellaneous appropriations) was \$18,933,392 in 1949, compared to \$35,691,370 for 1948.

Revenue from all freight transportation was \$136,901,862, a decline of 20.53 per cent. Revenue from passengers was off 12 per cent to \$5,497,523, and that from mail, express and other operating sources fell 7 per cent to \$6,547,587.

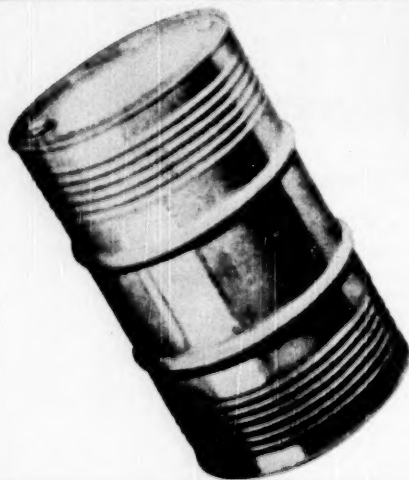
The Mead Corp., paper and paperboard manufacturers, of Dayton, Ohio, in its annual report for the fiscal year ended December 25, 1949, shows profits of \$3-

416,066, equal after preferred dividends to \$4.10 per share on the 716,200 common shares outstanding. This compares with \$5,013,916 or \$6.36 a share on the 710,684 common shares in the previous year. Net sales for 1949 were \$76,648,806 which compared with \$84,837,549 in 1948.

Earnings and sales of the **Gulf Oil Corp.**, Pittsburgh, Pa., in 1949 recently were reported to stockholders as second highest in the firm's history. Only in the exceptional year of 1948 were they at a higher level. Earnings were set forth in the company's annual statement as \$100,877,041, or \$8.89 per share, as compared with \$153,539,299, or \$13.53 per share for 1948. Revenue from sales of products and other operations was \$969,502,768, or approximately \$99,000,000 less than in 1948.

American Potash & Chemical Corp., of Trona, Calif., recently reported for the year ended December 31, 1949, net income of \$1,791,019 equal to \$2.86 a share on the Class A and Class B stocks, as compared with \$1,727,154 or \$2.74 a share in the preceding year.

Quarterly dividends totalling \$1.50 a share on the Class A and Class B stocks and \$4 a share on the preferred stock were paid during the year. Sales in 1949 amounted to \$13,692,992, compared with \$14,520,964 the previous year.



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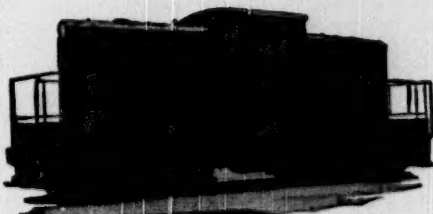
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DAVENPORT LOCOMOTIVE WORKS

WHO'S WHERE

Guy S. Langford, formerly office manager of the **McCormick Spinning Mill**, has been named personnel manager of the new multi-million-dollar **Harris Plant of Greenwood Mills**, South Carolina.

J. M. Robbins has been elected vice president manufacturing of **B. F. Goodrich Rubber Co.**, of Canada, Ltd., it was announced in Kitchener, Ontario, company headquarters, by **George W. Sawin**, president of the Canadian Co.

Inland Steel Products Co., Milwaukee, Wis., manufacturers of steel building materials, has made two personnel changes in its purchasing department, according to **George F. West**, vice president in charge of purchasing.

Frederick E. Wood has been named to the position of Steel Buyer, and **Lester Buffon** has been promoted to Buyer of Supplies and Resale of Items.

Orville H. Mowbray has rejoined the sales engineering staff of the **National Radiator Co.**, Johnstown, Pa., and again has been assigned to the Baltimore branch sales office at 2100 St. Paul St.

Mr. Mowbray came with **National Radiator** in 1937. He served as a sales engineer in the Baltimore and Philadelphia territories until 1941 when he joined the **Corps of Engineers**.

Ralph Krohn, Jr., has recently been appointed sales representative by the **Pyrene Mfg. Co.**, fire extinguisher manufacturers of Newark, N. J.

Mr. Krohn, a native of Houston, Texas was formerly sales engineer for **Ware Laboratories** of Houston, manufacturers of building products. Prior to this he was sales manager for the Specialty Division of the **Aluminum Co. of America** for Houston and vicinity.

M. E. Brinkerhoff, a veteran of more than 30 years' service with the **National Supply Company** of Pittsburgh, Pa., has

NEW PLANT TURNS PINES INTO PAPER!

Southern pines are made into 100,000 tons of newsprint annually in this huge plant of the **Coosa Newsprint Co.**, Childersburg, Ala., shown under construction. Ingalls fabricated and erected the dozens of processing and storage tanks.

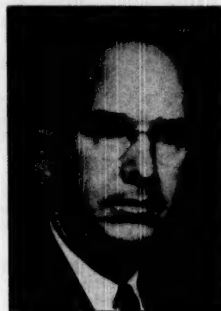
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Sales Offices in New York, Chicago, Pittsburgh, New Orleans



M. R. Brinkerhoff

been appointed assistant division credit manager, with headquarters in Shreveport.

His territory includes Louisiana, Mississippi and Alabama, plus east Texas and southern Arkansas, the company announced.

L. E. Ward, Jr., industrial agent for the **Norfolk and Western**, has recently been promoted to assistant industrial and agricultural manager of the railway. A native of Pocahontas, Va., **Mr. Ward** joined the railway as assistant industrial agent on July 1, 1940. He was advanced to industrial agent on August 1, 1941.

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THROUGH THE HEART OF THE SOUTH

BUSINESS NOTES

The **O'Brien Machinery Co.**, Philadelphia, Pa., announces that they are moving their entire organization on May 1 to their new plant at 1545 N. Delaware Ave., Philadelphia. Their complete organization will consolidate in this plant, including offices, shops and warehouses. The arrangements have been completed so that they will be operating at that location at that time. The new telephone number at the new address will be GA 6-1150.

Louisiana Industrial Equipment Co., Baton Rouge, La., has recently been named regional product distributor for the Industrial Products Division of **Modglin Company, Inc.**, Los Angeles, according to an announcement by Glen M. Alford, Sales Manager, Modglin Industrial Products Division.

The Louisiana Industrial Equipment Company will handle distribution of Perma-fiber, the new product development which is expected to revolutionize the operation of rotary type power street cleaning equipment for municipal, state and federal government as well as industrial users.

Irving S. Norry, president of the **Electric Equipment Co.**, of Rochester, N. Y., has recently announced the promotion of **Sidney Gilbert** to vice president of the company. It was also announced that **Warren A. Hafner** has been promoted from shop superintendent to manager of Consumer Sales. The Electric Equipment Company, founded in 1934, is a leading dealer in the sale of new and rebuilt electric motors, generators and transformers.

Organization of the **Southern Chain & Mfg. Co.**, Birmingham, Ala., was recently announced by James W. Dickey, vice president and general manager of the **Round Associate Chain Companies** with which Southern Chain will be affiliated.

General offices and plant warehouse of the new company will be located at 1294 Second Ave., North, Birmingham.

The **Southern Chain & Mfg. Co.** will operate as an independent concern and will be managed and operated entirely by Southern personnel. It will, however, distribute the products of other Round associate companies which produce industrial, marine, railway, automotive, building, home and farm chain of every type, as well as chain hoists and other material handling equipment.

Increasing demand by the metal working industries for tools that will reduce costs and increase production per machine hour has led to the appointment of **Tools and Supplies, Inc.**, 3131 Olive St., St. Louis 3, Missouri, as an authorized distributor for St. Louis and the St. Louis area by **Carboloy Co., Inc.**, of Detroit.

Headquarters and salesroom will be maintained in St. Louis.

Louisville Industrial Foundation, Inc., has changed its address from Columbia Bldg., Louisville, Ky., to room 305, Commerce Bldg., 304 West Liberty St., Louisville 2, Ky.

United States Testing Co., Inc., announces the moving of its New York City offices to the McGraw-Hill Building, 330 W. 42nd St., recently. The new office will be managed by Mr. Thomas C. Ridgway of the company's service division. Its New York office has heretofore been located at 1450 Broadway.

Raybestos-Manhattan, Inc., of Passaic, N. J., wishes to announce that after April 15th, their New York offices will be located at 500 Fifth Ave., New York City, corner 42nd Street. The previous location was at the Equitable Bldg., at 120 Broadway, for over 25 years. These offices include the New York and New England district office of the Manhattan Division and the Corporation Export Department.

including Allied Asbestos and Rubber Co. (Export), Inc.

Appointment of **Lloyd E. Mitchell, Inc.**, as an approved applicator for the Nelson stud welding method of installing corrugated steel and protected metal roofing and siding has been announced by William P. Flanagan, vice president of the firm, which has its headquarters at 4650 Reisterstown Rd., Baltimore, Md.

The franchise issued by the Nelson Stud Welding Division of **Morton Gregory Corporation**, Lorain, Ohio, covers all of Maryland except four of the southern counties, and is designed to facilitate the use of this high quality, economical method in new construction and reroofing projects in this territory.

A new **General Electric** apparatus sales district, twelfth in the nationwide G-E Apparatus Department sales system, was established recently, according to C. H. Lang, vice president in charge of apparatus sales.

G. F. Maughmer, formerly manager of the G-E sales office at Los Angeles, has been appointed to head the new organization, which will have its headquarters at St. Louis. The new district consists of all sales areas presently in the company's St. Louis, Kansas City and Omaha territories.

Edmund D. Haigler has recently joined the **Fischer & Porter** Organization in Hatboro, Pennsylvania, to work on special customer engineering problems.

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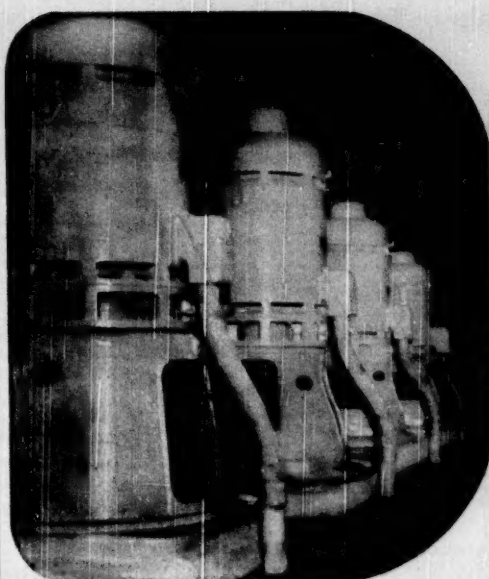
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New Plants

(Continued from page 16)

ODESSA—Johnson Brothers, one-story service station.
PASADENA—Champion Paper & Fibre Co., office building.
FORT ARTHUR—Fort Arthur Menhaden Products, Inc., plant on Fort Arthur Canal, \$250,000.
SAN ANGELO—Ace Builders Co., one-story warehouse and office.
SAN ANTONIO—Ebert Air Conditioning Co., 1026 Ashby Place, remodeling air conditioning shop and office building.
SAN ANTONIO—Magnolia Petroleum Co., 227 Broadway, service station.
SAN ANTONIO—Solo Serve Improvement Co., 118 Soledad St., addition, \$24,216.
SNYDER—D. C. Worley, plans business building.
TYLER—Glover Tunnel & Leon Kent, one-story service station, \$24,000.
TYLER—Tyler Machinery & Supply Co., warehouse and office building.
VICTORIA—Victoria Electric Cooperative Co., headquarters facilities.
VICTORIA—Albert York, service station, corner Moody & Murray St.
WACO—Brasos River Transportation Electric Corp., Inc., headquarters building.
WAXAHACHIE—Coca Cola Bottling Co., 1101 Second Ave., alterations and additions to bottling plant, \$68,300.
WICHITA FALLS—Carnation Milk Co., general remodeling present building, 4th at Ohio.

VIRGINIA

ALEXANDRIA—Carlyle R. Boguess, President of Southern Iron Works, and Clarence C. and Eugene Simpson, partners in Eugene Simpson & Brothers, general contractors, have acquired a three-story building, will be remodeled.
DANVILLE—Atlantic Greyhound Corp., P. O. Box 2553, Charleston, W. Va., bus terminal.
KIPTOPKE BEACH—Virginia Ferry Corp., ferry terminal building.
NARROWS—Celanese Corp. of America, plans expansion of its textile plant, new

building on west side of present plant; will also install new equipment.

NORFOLK—Norfolk Port Authority, 600-100 bushel grain drying and storage plant on Virginian Railway—belt line right-of-way, \$800,000.

NORFOLK—Tidewater Regional Market, Inc., ten storage buildings on McGinnis Industrial Center property.

RICHMOND—O. D. & Benjamin, storage tank, Maury & Bedford St., \$39,000.

RICHMOND—Richmond Hardware Co., building.

RICHMOND—Richmond Newspaper, Inc., additions, \$400,000.

COMING EVENTS

MAY

1—National Association of Hosiery Manufacturers, annual meeting, Claridge Hotel, Atlantic City, N. J.

1-2—Southern Association of Science and Industry, tenth annual meeting, Hotel Fort Sumter, Charleston, S. C.

1-2—Hosiery Industry Conference, Claridge Hotel, Atlantic City, N. J.

7-9—Conveyor Equipment Manufacturers Assoc., meeting, The Homestead, Hot Springs, Va.

8-12—American Textile Machinery Exhibition, sponsored by National Assoc. of Textile Machinery Mfrs., Atlantic City Auditorium, Atlantic City, N. J.

8-12—American Foundrymen's Society, annual convention and exhibition.

11-13—Cotton Mfrs. Assoc. of South

Carolina, annual meeting, Fort Sumter Hotel, Charleston.

11-13—Carolina Yarn Ass'n, annual outing, Carolina Inn, Pinehurst, N. C.

15-17—Industrial Furnace Mfrs. Assoc., annual meeting, The Homestead, Hot Springs, Va.

17-19—Cotton Mfrs. Assoc. of Georgia, fiftieth annual convention, Sheraton Plaza Hotel, Daytona Beach, Fla.

23-26—National District Heating Assoc., annual meeting, Grove Park Manor, Asheville, N. C.

JUNE

1-3—Southern Textile Assoc., annual convention, Ocean Forest Hotel, Myrtle Beach, S. C.

12-16—International Amphitheatre, Materials Handling Exposition, Chicago, Ill.

12-16—American Electroplaters' Society, international electrodeposition conference, Statler Hotel, Boston, Mass.

19-23—American Society of Mechanical Engineers, semi-annual meeting, Hotel Statler, St. Louis.

AUGUST

7-19—First U. S. International Trade Fair, Coliseum, International Amphitheatre and Navy Pier, Chicago, Ill.

SEPTEMBER

11-15—Instrument Society of America, Instrument conference and Exhibit, Buffalo Auditorium, Buffalo, N. Y.

19-21—American Society of Mechanical Engineers, fall meeting, Hotel Sheraton, Worcester, Mass.

26-29—Association of Iron & Steel Engineers, exposition, public auditorium, Cleveland, Ohio.

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V-type design permits a shorter crankshaft and less height than with a "straight-in-line" engine, assuring a more compact power unit.

4-cycle single cylinder models, 3 to 9 hp., and 2-cylinder models, 7 to 13 hp., also available. Detailed data on request.



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World's Largest Builders of Heavy Duty Air-Cooled Engines

Frisco's Use of Diesels Increases 36 Per Cent In 1949

Diesel freight locomotive performance on the St. Louis-San Francisco Railway (Frisco) increased approximately 36 per cent in 1949 over that of the preceding year as the company continued its changeover from steam locomotives, President Clark Hungerford declared recently in the company's condensed annual report.

In 1949, the report declared, percentage of road miles performed by diesels had reached 45.6 per cent in comparison to only 9.9 per cent for the preceding year. At the same time, switching service of the Frisco was 78.4 per cent dieselized in contrast to 55.4 per cent at the conclusion of 1948.

"At year-end," the report said, "diesels were turning in 54 per cent of the freight train miles handling 75 per cent of gross ton miles and 84 per cent of the switching service."

During the year just recently ended, the Frisco reported that it had placed 66 1500-horsepower road freight units, five 1500-horsepower all purpose units and 11 1000-horsepower switching units in operation.

SECTIONAL STEEL BUILDINGS

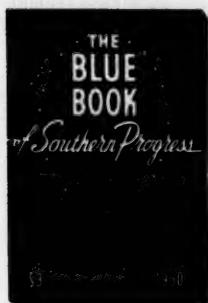
Sectional steel buildings as engineered and fabricated by Allied Steel Products Corporation are adaptable and used for many diversified purposes. Each Allied building is designed to meet the particular requirements of the customer.

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TRADE LITERATURE

Wood Preserving Division of Koppers Co., Inc., Pittsburgh, Pa.—Four-page illustrated folder describing Koppers pressure creosoted timber panel grade crossings. The folder describes the construction of the pressure-creosoted, hardwood crossings together with the sizes and types available. Information on shipping and installation also has been included.

Center pages of the folder contain blueprints of typical grade crossings showing the layout of 90-degree two-track crossings and skewed two-track crossings.

Foxboro Co., Foxboro, Mass.—Application Engineering Data Sheet covering control of cleaning cycles for traveling screens. A schematic installation drawing and a typical wiring diagram are included. Copies of the sheet \$2.50, are available from the company upon request.

Market Guide for Latin America, 173 Broadway, New York 7, N. Y.—Four-page Market Survey of Venezuela is offered free to interested manufacturers and exporters giving a complete analysis of the rich and promising market, one of the few markets having an ample supply of dollar exchange.

Remington Rand, Inc., New York 10, N. Y.—“Blueprint for Figure-Fact Efficiency,” a booklet describing economical mechanized accounting methods for seven figuring problems, is available free to builders and contractors.

In illustrated problem-answer style, the booklet shows how error-free bid preparation can be achieved.

Chelsea Fan & Blower Co., Inc., Irvington, 11, N. J.—Chelsea illustrated catalog giving full engineering information, dimensions, performance and prices regarding all types and sizes of fans for industrial, commercial and residential applications. Included is information on direct drive or belt driven window fans, industrial pressure fans, mancoolers, PH units, duct booster fans and various fans of all kinds and description.

Allied Radio Corp., Chicago, Ill.—Dictionary of Electronic Terms containing over 2,500 terms used in television, radio and industrial electronics. Definitions cover mostly modern techniques and equipment, but range from many words no longer in general use, retained for historic reasons, to the new language of color television and the electronics of nuclear physics.

Over 125 illustrations and diagrams of components, equipment, and electronic circuits are included, as well as an appendix section containing useful radio data.

Eutectic Welding Alloys Corp., 49 Worth St., New York, N. Y.—8-page brochure discussing new production welding techniques. The brochure examines such problems as finishing costs, scaling, distortion, softening of heat-treated metals, burn through, weld failure from impact, joining of dissimilar metals, and others. This booklet may be obtained free by writing for volume 6, No. —, to the address given above.

The Wilson Corp., 370 Lexington Ave., New York 17, N. Y.—23-page catalog featuring their rolling steel doors, rolling wood doors, sectionfold overhead doors, midgeat slat closures, rolling steel grilles and rolling partitions. The catalog gives the basic designs and dimensions of the various types of Wilson doors. Many charts and specifications are listed. Additional information, detailed drawings and specific recommendations will be supplied promptly if you request them from the company.

Anemostat Corporation of America, 10 East 39th Street, New York—A new 68-page selection manual that makes the choice of proper air diffusers much easier. Starting with typical case examples, the manual tells how to calculate required air volume, then explains the technique of locating diffusers and determining number of units required. Other pages are devoted to charts, details of diffusers, accessories and applications.

Eutectic Welding Alloys Corp., 49 Worth Street, New York 13, N. Y.—A new two-color descriptive folder on development in aluminum welding metallurgy.

Known as EutecRod 190, this thin flowing alloy for lap, corner and square butt joints on aluminum avoids the melting of thin sections, by bonding at approximately 150 degrees below the melting point of aluminum. Copies are available from the above address. Ask for form Eu-31.

Anti-Friction Bearing Distributors' Association, 1900 Euclid Building, Cleveland 15, Ohio—20-page booklet entitled “Installation, Maintenance, Removal of Anti-Friction Bearings.” One of the most comprehensive booklets on bearing care to date. It has been compiled and printed by the Association as a service to plant supervisors maintenance men, etc. Copies may be obtained free by writing the Association.

Boice-Crane Co., 930 Central Ave., Toledo 6, Ohio—A new folder on the new Friction-Matic wet tool grinder. Said to be ideal for hand tools, carving and carpenter tools, knives, etc., this tool employs a simple friction roll drive. Six models are available. Folder sent free on request.

U. S. Stoneware, Akron, Ohio—24-page booklet giving complete information on all formulations of Tygon plastic tubing, listed as T77. A copy can be obtained by writing the company at P. O. Box 350, Akron 9, Ohio.

Edward Valves, Inc., East End, Ind.—A new bulletin describing in detail the new Edward Fig. 444 series globe and angle stop valves. The bulletin gives design, dimensional data, material specifications, and list prices of the new series which is built in both 600 and 1500 lb. classes. The company will supply copies of the bulletin free of charge.

Hamilton Tool Co., Hamilton, Ohio—Bulletin P-50 recently issued is of interest to all those faced with the problem of lifting and transporting heavy tools or materials, as well as those who are interested in the modern technique of “stock positioning.” Available free.

Ralph V. Bulon, Inc., 3900 N. 2nd Street, Philadelphia 40, Pa.—New illustrated catalog, Asphalt Mastic Flooring. The acid resisting, waterproof, slipproof and long-wearing qualities of these floors for many industrial needs are attractively presented. Included is information concerning installation, specifications, etc. Offered free to maintenance men and others interested in “tailor-made” floors.

Hobart Brothers Company, Box DM 853, Troy, Ohio—4-page illustrated folder shows and describes 15 features of gasoline engine driven arc welders. Also shows specifications of 10 different models of such arc welders, and combination models of arc welders and power units.

Seletron Division of Radio Receptor Co., Inc., 251 W. 19th Street, New York 11, N. Y.—A new 4-page pamphlet on the design, application and servicing of selenium rectifiers, including complete description and tabulation of test and repair procedures, plus information on trouble-shooting methods for the half-wave circuit. Copies available without charge.

Air Reduction Sales Co., 60 E. 42nd Street, New York 17, N. Y.—A new arc welding machine catalog, the first to include all the machines in the Airco line. It contains 36 pages, well illustrated, divided into two parts. The first of these deals with arc welders, and the second with DC machines. This pamphlet is the fourth in a series of ten. Available free.

Emerson Electric Manufacturing Co., St. Louis 21, Mo.—60th Anniversary fan catalog, illustrating in color, and describing in detail the firm's complete line of fans for 1950. Write for catalog (Unit X6549) on company stationery.

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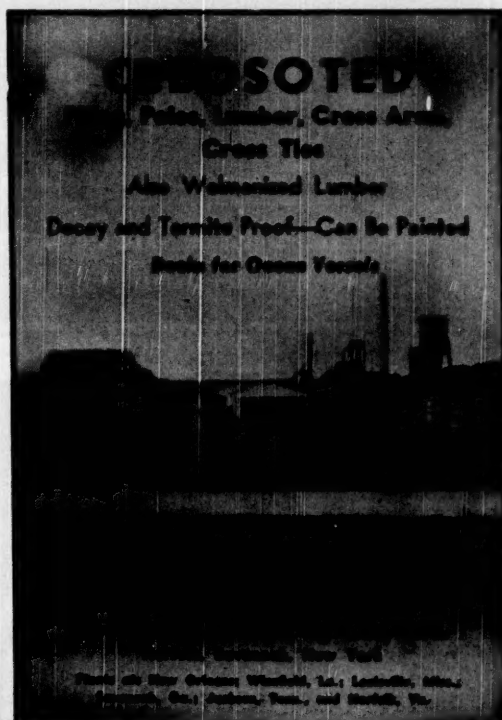
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1950 Directory of Federal Purchasing Agents, Available

A complete one-volume directory of the various purchasing offices in the federal government is now available to manufacturers and distributors. The new 112-page book, "1950 Directory of Federal Purchasing Agents," published by the Statesman Press, National Press Building, Washington 4, D. C., retails at \$2, postpaid. It is not offered through standard book stores.

The directory indexes about 6,000 different items purchased regularly by the various departments and bureaus. It also carries a master index indicating the permanent address of each procurement officer.

Of special interest to building contractors, the section on public works itemizes 312 new federal construction projects now on the drawing boards of the various engineering units in Washington. These projects represent combined con-

struction authorizations in excess of \$100,000,000 for the next eighteen months.

The book covers every branch of government, including Marshall Plan authorizations for overseas assistance, and federal stock-piling of strategic materials. It takes account of all the 1949 reorganization orders promulgated under the Hoover Commission recommendations.

Ralston Purina Co. to Begin \$ Million Expansion at Macon

A million dollar feed mill is scheduled to be built at Macon, Ga., by the Ralston Purina Company of St. Louis, Missouri, manufacturers of livestock and poultry feeds and sanitation products. According to Donald Danforth, president of Purina, the increasing demand for commercial livestock and poultry feeds in the Southeast necessitated the addition of the 38th

feed mill to Purina's production facilities.

Mr. Danforth points out, "Diversified livestock and poultry farming have been steadily increasing in the Southeast, and many farmers, who are changing from cotton planting to grain farming and livestock and poultry production, are following scientific feeding programs." As a result of this activity, production of Purina's mills in North Carolina and Tennessee will not be able to handle the indicated demand for chows in the future.

"The new mill is expected to have a capacity in excess of 100,000 tons annually and will employ local labor," continues Danforth, "and much of the grain and proteins used in the manufacture of feed will be purchased locally." Construction of the mill is expected to get underway in the immediate future and may be in operation by the end of 1950.

Louisiana is Nation's Top Seedling Producer

The United States last year produced enough tree seedlings to reforest more than a third of a million acres of timberland. This year the figure may go up to half a million acres. These facts were revealed in a recent survey of all federal, state and private nurseries in the country made by J. C. McClellan, chief forester for American Forest Products Industries, Inc., Washington, D. C.

More than 380 million seedlings were produced in the nation's nurseries in 1949. The country's top seedling producer was Louisiana which turned out 53½ million trees, 14 per cent of the national output. "Outstanding as this figure is," said McClellan, "it is even more significant that industry owned nurseries contributed nearly as much to this Louisiana total as did state owned nurseries." Louisiana has more nurseries than any other state. Next 12 states in approximate order of 1949 seedling production were: South Carolina, 32 million; Georgia, 27 million; Florida, 25 million; Alabama, 21 million; Tennessee, 21 million; Wisconsin, 21 million; Michigan, 21 million; New York, 20 million; Texas, 15 million; Washington, 10 million; Mississippi, 9 million; Nebraska, 8 million.

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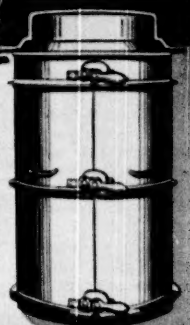
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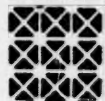
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Dallas Dairy Announces \$600,000 Expansion Program

The Oak Farms, Inc., of Dallas, has announced plans for a \$600,000 expansion program for 1950. J. R. Temple, president of the company and former Mayor of Dallas, says the expenditure will include enlargement, remodeling and modernization for the dairy plant.

The present plant will have a doubled capacity with the completion of the new program that will include a 41,000-square foot addition. Modernization plans call for the installation of the latest type of equipment for the handling, processing and manufacturing of dairy products. The proposed building will be constructed of reinforced concrete, trimmed with red brick and Arizona stone. A section of the building will be three stories high.

The building's wiring, plumbing, and steam pipes will be enclosed in the walls and floors. This feature with the all-tile floors and walls, will assist in keeping the building clean.

New automatic equipment will speed up processing of milk for mild deliveries at the plant. The same equipment will mean less waiting time for the dairy farmers who deliver the milk.

An automatic cottage cheese mixer and packaging machine will be an added feature in the new equipment according to Temple. The new equipment will enable a 20-fold increase in the capacity for the making of creamed, farm-type and chives cottage cheese.

Another feature of the new plant will be the ice cream department. There will be room for equipment to make and package the ice cream. A 30,000 cubic-foot hardening room with temperature maintained at 20 below zero will be a feature of the department.

Farmers will again be assisted by the loading facilities. A fifty-foot dock for farmers and five chutes for trucks which will be loaded from conveyor belts.

Oak Farms was established in 1936. The original plant had fourteen employees. The present plant has 224 and operates over sixty trucks.

Redmond Mfg. Co. Plans Expansion At Jacksonville, Ark.

The Redmond Manufacturing Company of Jacksonville, Arkansas, has recently announced plans for a new expansion program. The plan calls for an additional \$250,000 of new equipment and the services of 100 new employees, to make electric motors.

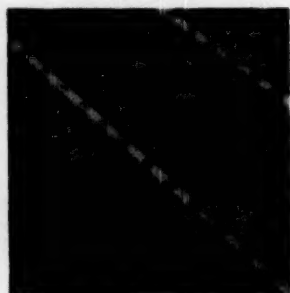
Texas A.&M. Announces Industrial Management Courses

Job evaluation and merit rating, production planning, and methods improvements are the subjects of three one-week and two-week short courses to be conducted by the Agricultural and Mechanical College of Texas this June.

These are the first of a summer series of Industrial Management Short Courses to be presented under the direction of V. M. Faires, Head of the Department of Management Engineering.

According to Faires, "This training program will make available to Texas firms the facilities and experienced industrial talent which we have at A.&M."

David E. Carlson, Associate Professor, who was until recently in charge of the wage administration and job evaluation program for one of the nation's largest employers of industrial labor will conduct the course on job evaluation. A. R. Burgess, Acting Professor, will draw on his nine years of industrial engineering experience in his presentation of the production planning course. Methods improvement instruction will be under the direction of Richard F. Bruckart, Assistant Professor who has practiced methods improvement in foundries, metal fabricating plants, and processing plants for eight years prior to coming to A.&M.



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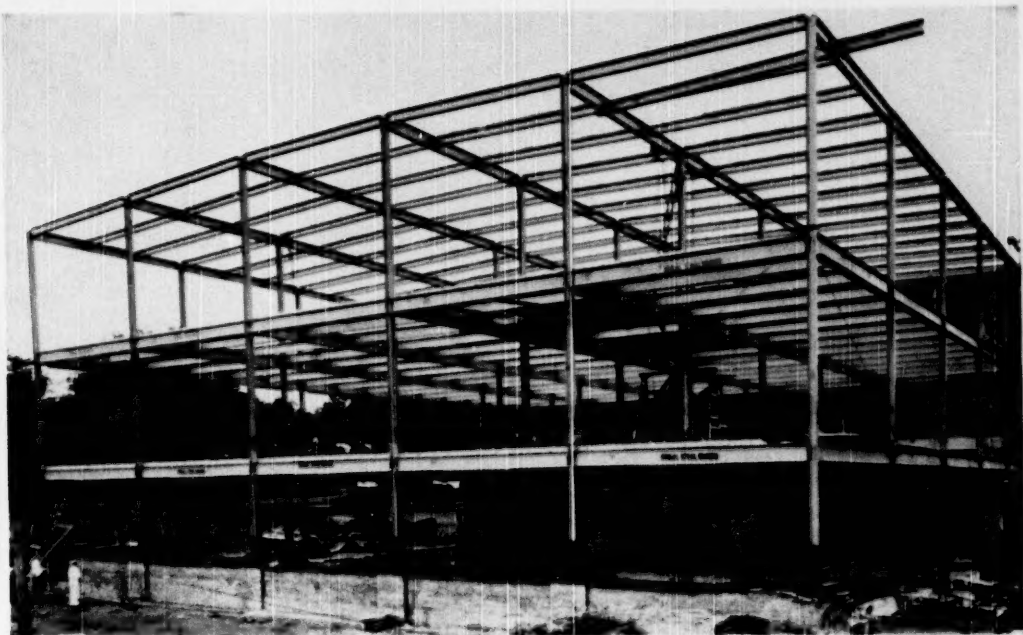
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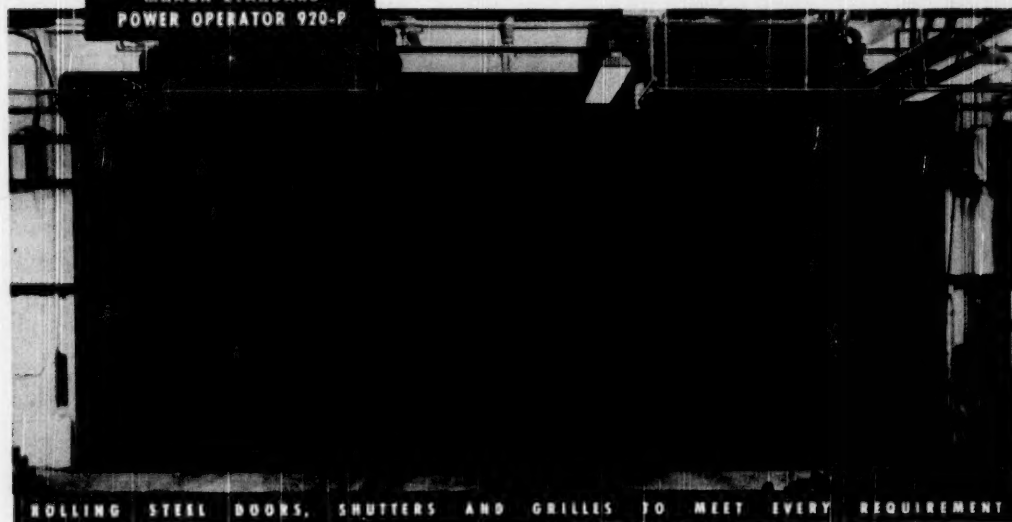
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